

WOMEN'S GENDER SCHEMAS FOR OBSTETRICIAN-GYNECOLOGISTS

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January 2011

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The current picture of women's healthcare in the U.S. includes rising malpractice rates, long hours and on-call schedules for obstetrician-gynecologists. As a result, one in seven OB-GYNs has stopped practicing obstetrics. One overlooked factor that may be exacerbating the OB-GYN shortage is a sizable decline in men entering the field. The problem of sex imbalance may be occurring because men are being actively discouraged from specializing in OB-GYN. This could be in part because of concerns that women are not interested in seeing a male OB-GYN. Indeed, results of studies that examine sex preference in choice of OB-GYN providers support that women exhibit a preference for a female OB-GYN provider approximately 50% of the time. A key process that may play an important role in women's preference for a female OB-GYN is their gender role schema. Gender role schemas may influence what women expect from OB-GYNs of a specific sex, and therefore influence preference. The two studies conducted for this thesis sought to investigate the content of women's schemas for male and female OB-GYNs and their impact on evaluation of OB-GYN providers. In study one, 96 college women were randomly assigned to describe what they believed were the typical characteristics of a male or female OB-GYN and describe what happens during a typical visit to a male or female OB-GYN's office. Results supported that women were more likely to describe male OB-GYNs as awkward, $X^2(1) = 11.2, p < .001$, and female OB-GYNs as easy to talk to, $x^2(1) = 7.2, p < .005$,

and knowledgeable, $\chi^2(1) = 6.8, p < .005$. Additionally, women were more likely to report the use of a chaperone, $\chi^2(1) = 7.0, p < .005$, and making small talk, $\chi^2(1) = 4.6, p < .005$, during visits with male OB-GYNs. Thus, women held more positive schemas for female OB-GYNs and male providers were regarded more negatively (e.g., as awkward or needing a chaperone in the room). Based on the results from study one, male gender schema consistent and female gender schema consistent narratives of a typical OB-GYN visit were developed. Then, a total of 126 women were randomly assigned to listen to audio recording of visits to either two male OB-GYNs or two female OB-GYNs. In both conditions, one OB-GYN engaged in male schema consistent behavior and one OB-GYN engaged in female schema consistent behavior. Results supported that providers who engaged in female consistent behavior were regarded more positively (i.e., they were rated as having more positive attributes, participants were more satisfied with their care, and participants were more likely to see that provider again), whether they were male or female. In addition, females who engaged in male schema consistent behaviors were rated more negatively than males who engaged in the same behavior. These results support that women's gender schemas may be influencing satisfaction with providers. Results suggested that women did not necessarily prefer female providers, but rather they were responding to the behaviors and characteristics they associated with female providers. Therefore, efforts should be made to train OB-GYN providers of both sexes in this interactional style.

WOMEN'S GENDER SCHEMAS FOR OBSTETRICIAN GYNECOLOGISTS

A Thesis Defense

Presented to

The Faculty of the Department of Psychology

East Carolina University

In Partial Fulfillment

of the Requirements for the Degree of

Master of Arts

by

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January 2011

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ACKNOWLEDGEMENTS

I would like to thank my parents for their invaluable support as I continue my education. I am grateful for their emotional support and confidence in my pursuits. I would also like to thank my committee chair and mentor Dr. Heather Littleton for her contributions to this current project. Her guidance is greatly appreciated. I would also like to acknowledge the assistance of several members of our lab who were integral in data collection for these studies. I am thankful to Britteny Hampton Holbrook, Pamela Andrae, Lindsay Deuble, Amy Lasiter, Lauren Lambertus, and Emily Whittle.

TABLE OF CONTENTS

LIST OF TABLES.....	x
LIST OF FIGURES.....	xi
CHAPTER1: LITERATURE REVIEW.....	1
Factors Contributing to the Decline in Access to OB-GYN Care	1
The Impact of Declining Numbers of OB-GYN Providers.....	4
Sex Imbalance as an Overlooked Contributing Factor.....	5
Trends in Patient Satisfaction with OB-GYN Providers.....	8
Role of Cognitive Schemas and Scripts in Patient Preferences and Satisfaction.	11
Relationship of Literature to the Current Study.....	16
Goals of the Current Study	17
CHAPTER 2: STUDY ONE.....	19
Participants.....	19
Materials and Procedures	19
Analysis Plan	21
Results	22
Demographics and Experience with OB-GYN Providers	22
OB-GYN Sex Preferences	23
OB-GYN Attribute Preferences	24
Provider Attributes	25
Provider Behaviors During a Visit	26
CHAPTER 3: STUDY TWO	28
Participants.....	28
Procedures	28

Materials	29
Provider Scripts	29
Provider Attributes	30
Patient Satisfaction	30
Provider Utilization	31
Additional Measures	31
Analysis Plan	31
Results	32
Demographics and Experiences with OB-GYN Providers	32
Provider Attributes	33
Patient Satisfaction	35
Provider Utilization	37
Provider Strengths and Weaknesses	38
CHAPTER 4: DISCUSSION	40
Limitations	44
Future Directions	45
REFERENCES.....	48
APPENDIX A: IRB APPROVAL LETTERS	54
APPENDIX B: STUDY ONE CONSENT DOCUMENT.....	57
APPENDIX C: STUDY ONE PROMPTS.....	60
APPENDIX D: STUDY ONE DEMOGRAPHIC QUESTIONNAIRE.....	64
APPENDIX E: STUDY TWO CONSENT DOCUMENT	66
APPENDIX F: SCRIPTS FOR AUDIO NARRATIVES	70

APPENDIX G: STUDY TWO QUESTIONNAIRES	75
APPENDIX H: STUDY TWO DEMOGRAPHIC QUESTIONNAIRE	78

LIST OF TABLES

1. Study one participant demographics	23
2. Study one women's reported sex preferences for providers	24
3. Study one women's reported desirable attributes for OB-GYN providers	25
4. Participant descriptions of OB-GYN provider attributes stratified by OB-GYN sex condition	26
5. Study one participant descriptions of behaviors included in a typical visit to an OB-GYN stratified by provider sex condition	27
6. Study two participant demographics	33
7. Study two provider attribute ratings stratified by provider sex and schema consistency	34
8. Study two provider satisfaction ratings stratified by provider sex and schema consistency	36
9. Study two provider utilization stratified by provider sex and schema consistency	38

LIST OF FIGURES

1. Study one provider attributes by schema condition and sex	35
2. Study one patient satisfaction ratings by schema condition and sex	37

Chapter I

Literature Review

Access to comprehensive, high-quality healthcare can be considered a necessary resource for all individuals to ensure physical health and well-being. Unfortunately, women's reproductive healthcare is a resource that many women in the United States (U.S.) are finding it increasingly difficult to obtain. The primary factor fueling this issue is the reality of declining numbers of obstetrician-gynecologists (OB-GYNs). As a result of declining numbers of OB-GYNs, more and more women are unable to receive necessary obstetrical and gynecological care. For example, there are nearly 1500 counties in the U.S. without a single OB-GYN (Moninger, ND). In addition, among practicing OB-GYNs, one in seven has stopped providing obstetrical care (Moninger, ND).

Factors Contributing to the Decline in Access to OB-GYN Care

Economic pressures are playing an important role in the declining numbers of OB-GYNs and their availability. One particular issue that is contributing to lack of access to obstetric care in particular is the increasing cost of malpractice insurance, which is directly tied to increasing litigation costs. For instance, in 2004, Florida (the state with the highest malpractice premiums for OB-GYNs) had average yearly premiums of \$194,000 for physicians providing obstetric care (Gazella, 2005). Some metropolitan cities, such as Miami, have premiums as high as \$277,000 per year (Gazella, 2005). In recognition of this problem, President George W. Bush's State of the Union Address in 2006 discussed the issue of declining numbers of OB-GYNs. In this address, he stated "Without the passage of reasonable reforms, the nation's badly broken medical liability system will continue to drive physicians like obstetricians and gynecologists out of the practice of medicine and drive up the costs of healthcare for all Americans" (Medical News

Today, 2006). Thus, this problem has received attention from both healthcare providers and politicians alike. This problem was again more recently highlighted when a healthcare bill was introduced in 2007 in Congress, endorsing the concept of a Patient Centered Medical Home (where patients receive multiple services in a primary care “home”). One goal of this bill was to address the issue of OB-GYN shortages in the United States (American College of Physicians, 2007).

If insurance companies are paying more to fight malpractice suits related to obstetric complications, they will in turn charge their insured physicians more in premiums. OB-GYNs have extremely high liability premiums, second only to neurosurgeons as a specialty, and also have lower reimbursement rates than a number of specialties (Moninger, ND). These higher malpractice premiums may make it cost prohibitive for OB-GYNS to continue practicing, and obstetrics in particular. North Carolina has experienced a lack of access to women’s health services, especially obstetric care, in many rural counties due to fewer physicians practicing (Fondren & Ricketts, 1993). As an example of the extent of this problem, lack of access to care reached a critical point in Rappahannock, Virginia when Rappahannock General Hospital was forced to close its obstetrical ward in 2004 due to escalating costs. Their two OB-GYNs had been practicing for more than 20 years; however, they were simply unable to bear the rising costs of malpractice insurance (Moninger, ND). Nationally, a survey of the American College of Obstetricians and Gynecologists (ACOG) found that one in seven OB-GYNs has stopped practicing obstetrical care, and another 20% have decreased their number of obstetrical patients (Moninger, ND). This economic pressure due to malpractice insurance is clearly having an effect on women’s access to care. If one in seven OB-GYNs have given up obstetrical care, this may especially affect women who live in counties with extant shortages of OB-GYNs. If those

who are practicing are forced to limit themselves to routine gynecological care, women may be hard pressed to find adequate care for themselves and their unborn babies. Indeed, in 2004 ACOG characterized 22 states as being in a “red alert” for their numbers of practicing OB-GYNs, meaning there are not sufficient OB-GYNs to meet the needs of patients in that area (ACOG, 2004). That is, nearly half of U.S. states do not have enough OB-GYNs to meet current patient needs. Declining numbers of OB-GYNs practicing obstetrics also affects the practice patterns of other healthcare providers, such as certified nurse midwives, who often practice under the supervision of a physician. They oversee approximately ten percent of U.S. births, and if they are not able to find a supervising physician this further affects lack of access to care (Moninger, ND). Thus, qualified alternative prenatal services (e.g., care by a certified nurse midwife) may also not be available to women.

In addition to economic pressures, there are work environment issues that may be contributing to the declining numbers of OB-GYNs. For instance, OB-GYNs face an intensive on-call schedule, especially for hospital-based care. They may have rotating call within a practice, or even face sole call for their patients. When compared with specialties such as dermatology or pathology that have more regular hours, OB-GYN may not be an appealing specialty for young physicians. Additionally, when an OB-GYN shortage exists, this creates a higher workload for those in the field. This may then increase stressful working conditions for currently practicing OB-GYNs (e.g., frequently being on-call, being the only provider on-call). Additionally, this could lead to over-worked providers who may be more likely to leave the field, further compounding the problem (Medical News Today, 2008).

Not surprisingly, given these economic and practice issues, declining numbers of medical students are choosing to specialize in the field. Indeed, John Nelson, a past president of the

American Medical Association as well as an OB-GYN who had to drop his obstetrical practice, stated new physicians were not choosing OB-GYN because, “You have to work long, erratic hours for fixed pay -- thanks to Medicaid and managed care dictating reimbursements -- with astronomical expenses and a constant fear of being sued. Young people are saying 'No thanks,' and who can blame them?” (Moninger, ND, p. 2).

The Impact of Declining Numbers of OB-GYN Providers

There are a host of problems associated with a lack of access to OB-GYN care. First and foremost, lack of access is associated with increased infant mortality (Allen & Kamradt, 1991). This may be due to both poor or absent prenatal care as well as issues with accessing prenatal and delivery services (e.g., having to drive many miles to one’s OB-GYN or delivery ward). In addition to obstetrical issues, lack of access to care can be linked with routine gynecological complications as well, such as lack of cancer screening and increased cervical cancer rates. Access to routine well woman care can also be compromised with an OB-GYN shortage (ACOG, 2009a). Additionally, since many women use their OB-GYN providers as their primary care providers, women may not receive adequate overall healthcare including important preventive care and health screenings (e.g., mammograms and cholesterol/triglyceride checks, as well as treatment of routine conditions such as hypertension).

The issue of declining numbers of OB-GYN providers is especially severe in many rural areas where the negative impact of these changes is already apparent. In the U.S., 18% of all births occur in rural areas, a figure which represents a significant need for obstetrical care. However, one third of rural women live in a county without a single OB-GYN (ACOG, 2009a). Thus, this leaves a substantial number of women without access to prenatal care. In addition to obstetrical care, rural women are more likely to have difficulty gaining access to routine

gynecological care. Indeed, rural women have been found to have lower rates of cervical cancer screening, as well as higher rates of cervical cancer itself. In addition, they are less likely to receive family planning services, including contraception. Overall, the issue of rurality is compounding an already-present lack of access to care for OB-GYN services and providers (ACOG, 2009a).

Sex Imbalance as an Overlooked Contributing Factor

The current picture of women's healthcare is one comprised of a lack of access for many women. Litigation costs and, in turn, rising malpractice costs, long hours and on-call scheduling for OB-GYNs, and differential availability of services for women in various areas of the U.S. are all playing a role in the scope of the current problem. However, one often-overlooked factor that may be exacerbating the OB-GYN shortage is sex imbalance of providers. First, there is clear evidence that fewer and fewer men are entering the field of OB-GYN. ACOG's membership report shows that since 1990 the percentage of men in the field of OB-GYN has greatly dropped (from 86.7% to 58.1%; ACOG, 2009b). There is also a sex imbalance in those entering OB-GYN residencies. According to the ACOG, "Between 1989 and 2002, the proportion of female OB-GYN residents rose from 44 to 74% while the proportion of female graduating medical students only increased from 33 to 44%" (Gerber & Lo Sasso, 2006). While females now represent only half of medical students, they are overwhelmingly represented in OB-GYN residencies. In addition to this trend, OB-GYN has a high attrition rate as a specialty. That is, when medical students do choose to begin OB-GYN training, they may not finish OB-GYN residencies. This further sets up OB-GYN as field experiencing a shortage (McAlister, Andriole, Brotherton, & Jeffe, 2008). Furthermore, there is a difference in the way in which men and women leave OB-GYN training, which supports an ever widening sex imbalance in the field

of OB-GYN. When women leave OB-GYN residencies, they are more often leaving for family related or personal reasons – i.e., leaving medicine all together. However, when men leave OB-GYN residencies they are leaving OB-GYN to go to other specialties, not because they are leaving medicine. This suggests that there is something about the field of OB-GYN that is causing men to select other fields over it, even among men with an initial interest in specializing in the field (Moschos & Beyer, 2004). Finally, men who complete OB-GYN residencies are more likely to go on for subspecialty training, such as gynecological oncology, and thus are less likely to enter the OB-GYN primary care workforce. While this trend is also seen in internal medicine and pediatrics, it is a more urgent problem in OB-GYN where there is already both a sex imbalance and a shortage of general providers in the field (Moschos & Beyer, 2004).

The problem of sex imbalance may be occurring because men are being actively discouraged from entering the field of OB-GYN (Lyon, 1997). This could be in part because of ideas that women are not interested in seeing a male provider for their women's healthcare needs. It is possible that male providers are perceived as less desirable by women as OB-GYNs, and therefore men are choosing other fields, or men who were initially interested in OB-GYN are being pushed into other related specialties (e.g., internal or family medicine). Given the scope of the lack of access problem in the U.S., it is obvious that every potentially qualified medical student who is interested in pursuing a career in OB-GYN should be encouraged to do so.

Additionally, OB-GYN practicing faculty may be reluctant to accept male medical students for clinical placements because of the difficulty or perceived difficulty in obtaining consent for them to participate in the requisite number of examinations for training purposes (Rowe, 2008). Indeed, there is evidence that while most women are comfortable allowing medical students to participate in their care, women who refuse may do so because of the sex of

the student (Berry, O'dell, Meyer, & Purwono, 2003). For example, Ching, Gates, and Robertson (2000) found that while sex was not a specific barrier to patient acceptance of medical students in their visit, they did find that women who refused medical student participation in their visit had a strong preference for a female OB-GYN provider (79%). Hartz and Beal (2000) similarly found that women who originally said that they did not want a medical student involved in their care were more likely to allow the student's involvement if it was stipulated to be a woman. Also of note, Hartz and Beal were only able to use male attending physicians at their study site because the female physicians did not accept male medical students for preceptor experiences. As a result of the belief that women are not interested in being examined by a male student, male medical students may receive the message that there is no place for them in the OB-GYN workforce. In a sense, they may feel as if they are at a "genetic disadvantage" in the OB-GYN field (Lyon, 1997). Overall, educators may be creating and reinforcing ideas for male medical students that OB-GYN is not the field for them, which may in turn contribute to men not entering the OB-GYN workforce, and thus a continued worsening of the OB-GYN shortage.

While fewer men entering the field of OB-GYN contributes to a lack of providers overall, it is also should be noted that women may be less available to work as many hours as male providers, further contributing to a shortage of availability of care. Indeed, a recent survey by the ACOG indicated that women are roughly 85% as productive as men are in the OB-GYN workforce (Pearse, Haffer, & Primack, 2001). This lower level of productivity likely reflects the fact that even professional women such as physicians bear a disproportionate burden of child and elder care responsibilities, and thus are less able to work a demanding schedule with a high load of on-call time. This also could result in a greater burden of on-call and other less desirable duties being shifted to male providers, potentially contributing to low levels of satisfaction

among male providers, and potentially men then leaving the field or dropping their obstetric practice.

Trends in Patient Satisfaction with OB-GYN Providers

As the belief that women would prefer to see a female OB-GYN appears to exist among medical providers, it is important to examine the role of sex in women's choice of OB-GYN provider, as well as the role of sex in satisfaction with obstetric and gynecological care. Sex preference for providers has been in a number of studies utilizing survey methodology. Results of these studies support that women are more likely than men to express a preference for the sex of their physician (Mavis, Vasilenko, Schnuth, Marshall, & Jeffs, 2005). Looking at studies examining sex preference in choice of OB-GYN providers specifically, results support that women exhibit a preference for the sex of their provider approximately 50% of the time, nearly always expressing a preference for a female provider. This preference is more likely to be seen in OB-GYN than in other specialties (Kerssens, Bensing, & Andela, 1997). There have been some cultural variables shown to influence this preference, such as religion. Zuckerman, Navizedeh, Feldman, McCalla, and Minkoff (2002) found that a higher proportion of Hindu (74%) and Muslim (89%) women prefer a female OB-GYN provider than Jewish or Christian women. However, approximately 50% of Christian and Jewish women still had a preference for a female provider. In addition to cultural variables, there may be situational variables involved in women's choice of provider. For instance, 60% of women who were already seeing a female OB-GYN endorsed a preference for a female provider. Perhaps this has to do with their original choice of a female provider, as well as possible reinforcement of their preference for seeing a female OB-GYN through experiences with only female providers (Zuckerman et al., 2002).

In addition, women often list provider sex as a key part of their decision making process regarding choice of OB-GYN provider. Zuckerman and colleagues (2002) found that provider sex was rated as important to women in choosing an obstetrician as either experience or cost. Additionally, 25% of women in this study stated that provider sex was one of the top three factors in determining their choice of OB-GYN provider. A second study similarly found that 12% of women would choose a female provider even over a male physician with more experience (Plunkett, Kohli, & Milad, 2002). Similarly, Mavis and colleagues (2005) found that women reported provider sex as part of the top 16 factors that influence their selection of OB-GYN provider. They also highlighted some possible sociocultural trends in sex preference with minority women being more likely to report a sex preference for their providers. In addition to merely being on the list of provider characteristics that women consider, this study found that sex was given similar weight in provider choice as such fundamental characteristics as “experience” and “listens to me.” Finally, Chandler, Chandler, and Dabbs (2000) surveyed sex preference for OB-GYN providers in a military population and found that while physician experience was most frequently chosen as the top criteria for choosing a physician, 10% of women still chose sex as their top criteria. Thus, overall, there exists a strong tendency for women to regard provider sex as an important part of the decision making process for choice of an OB-GYN.

While studies of sex preferences for OB-GYN providers has been carried out mostly through survey methods, a few studies have attempted to investigate the interaction of provider sex and patient satisfaction more in depth. One such study was conducted by Roter, Geller, Bernhardt, Larson, and Doskum (1999) and focused on patient satisfaction, rather than sex preferences. Patient satisfaction is important to consider in addition to provider preferences given that it is directly related to follow up with therapeutic recommendations (Christen, Alder, &

Bitzer, 2008). Specifically, Roter and colleagues (1999) asked women about their perceptions of satisfaction with their OB-GYN providers and then coded audiotapes of their actual patient-provider interactions for traditional sex interactions (according to stereotypically male or female behaviors) by the providers. They found that despite the fact that male OB-GYN providers displayed more behaviors that one might expect would lead to his or her patient satisfaction; women were still more satisfied with female providers. Specifically, male OB-GYNs exhibited more traditionally “female” behaviors such as agreeing with their patients, expressing concern, asking open-ended questions, attempting to form a partnership with their patients, asking for confirmation, and orienting the patient to procedures than their female OB-GYN counterparts. This suggests that perhaps women’s expectations that they would receive more compassionate care from female providers fueled greater satisfaction with their care, given that female providers were actually engaging in fewer behaviors that should increase patient satisfaction (Roter et al., 1999). Schnatz, Murphy, O’Sullivan, and Sorosky (2007) also investigated sex and its impact on perceptions of OB-GYN care. They asked women to choose an OB-GYN provider from an array of photographs and brief descriptions of the providers. The women chose a female provider in 83% of the cases. However, when humanistic descriptors were added to the male photographs (such as “warm bedside manner”), 62% of women chose a male OB-GYN provider. This suggests that perhaps some women are implicitly associating humanistic qualities with female providers and therefore preferring females based on these qualities. Thus, overall results suggest that women do indeed have a preference for a female OB-GYN in many cases, that women may be more satisfied with the care they receive from females even if the care is not higher quality, and that women may perhaps associate humanistic qualities more strongly with

female providers. However, while suggestive, these studies do not definitively determine what is fueling these sex preferences and possible differences in patient satisfaction.

Role of Cognitive Schemas and Scripts in Patient Preference and Satisfaction

One process that may underlie women's reports of preferences for female providers and associated satisfaction is their gender role schemas and scripts for male and female OB-GYN providers. More generally, a schema is an organized cognitive structure that is activated when people enter a relationship with which they are familiar that then serves to guide the interactions within that relationship (Fiske & Taylor, 1984). Schemas also serve to influence cognition through the organization of memory and attention, as well as interpretation of ambiguous information (Fiske & Taylor, 1984). In other words, schemas influence what we pay attention to and how we remember people and situations.

One particular type of schema is a role schema, which can include characteristics associated with individuals of a particular gender, race, occupation, social status, etc. Gender role schemas are particularly powerful schemas. Specifically, gender role schemas consist of "the features we assign to men and women in our society, features not assigned due to biological sex, but due to the social roles that men and women hold" (Helgeson, 2009, p. 79). Gender role schemas involve both prescriptive and descriptive components; that is components that both describe how men and women *are* and how they *should behave*. The process of gender role schema acquisition begins in very early childhood (Helgeson, 2009). This process is universal, as all cultures have specific roles for women and men and begin the process of socializing these roles with children (Bem, 1981). Children are exposed to ideas of gender very early including gender stereotyped toys and games. In fact, according to Helgeson (2009), children around age five often rigidly apply gender-based information to specific sex categories (e.g., men are

doctors, women are nurses). Once these gender role schemas are activated, they may prove highly influential in cognitive processing. Fiske and Taylor (1984) discuss the differences between ascribed and achieved roles and their various schemas. Achieved roles include those that accompany a person's status or job (e.g., physician). Ascribed roles include those that accompany traits that are present with a person at birth (e.g., sex). Either role schema may include expected behaviors and characteristics that are included in the particular role.

According to Fiske and Glick (1995), it is mostly automatic for people to categorize one another in terms of their gender. Gender is a category that may indeed be more salient than others (race, age, etc). The role schema of gender carries with it "culturally shaped assumptions about men's and women's personal traits, abilities, and the roles for which they are suited" (Fiske & Glick, 1995, p. 101). It is possible that one reason gender may be an especially salient role schema is that it is activated immediately upon meeting a person, as sex is typically apparent. Our society is programmed to categorize people immediately as either male or female. For instance, in nearly all occasions the first question a new parent is asked regarding their child is "Is it a boy or girl?" Additionally, the way that people then respond to information about a person is influenced by information about their sex (Ruble & Stagnor, 1986).

Gender role schemas are also especially salient when people encounter ambiguous stimuli. According to Chang and Hitchon (2004), schemas are useful as mental shortcuts that help people interpret information when few identifying clues are available regarding a situation. When confronted with situations with missing information, a person utilizes their gender schema to fill in the blanks of the given situation. As a result, when people encounter a situation they are unfamiliar with, such as a visit to a new physician, they may rely on cues that they are familiar with, such as the physician's sex. Additionally, Chang and Hitchon (2004) point out that when

people are confronted with new information, they may try to “match it with a schema” (p. 200), which means that when women meet a new OB-GYN they may try to automatically match the person into their physician schema, as well as their general person schemas for gender, race, etc.

Helgeson (2009) points out that when we encounter behavior that is schema consistent, we make dispositional attributions for behavior, such as “women are polite,” but when we encounter behavior that is schema inconsistent, we make situational attributions for a behavior, such as “that woman was being rude and so must have been having a bad day.” Additionally, Helgeson (2009) further contends that people who engage in behavior that is schema inconsistent may also be penalized. This “backlash effect” provides negative feedback to people who display schema inconsistent behavior. For instance, when a woman displays compassionate behavior she may not be overtly rewarded. However, she may be overtly penalized for displaying non-nurturing behaviors. This penalization helps to preserve gender roles by discouraging people from continuing to display behavior that does not fit in with their assigned sex. In fact, Fiske and Taylor (1984) suggest that gender schemas may be so strong that even when people are faced with inconsistent information for their gender schema, they persevere in believing that schema. That is, individuals are far more likely to view individuals as exceptions to the schema, rather than changing their schemas.

Gender role schemas may affect healthcare encounters in two separate ways. First, women may have schemas that characteristics such as caring and compassion are “female” traits. As a result, they may assign these traits to female healthcare providers. Accordingly, women may view men as possessing fewer desirable characteristics as OB-GYN providers than female OB-GYNs. They may then be less likely to choose to see men as their OB-GYN providers. Because they have associated these desirable characteristics with their schemas for women, they

may also predict that women should engage in more positive behavior in an OB-GYN encounter. As a result, they may provide positive feedback to a female OB-GYN who engages in these behaviors. According to Helgeson (2009), gender role schemas are different from many other schemas because sex is a category that is immediately apparent upon meeting a person. Thus, as soon as a patient meets a provider they have an activated schema regarding what behaviors that provider should exhibit. This schema may even activate prior to meeting the provider, when a patient learns the provider's name.

In addition to role schemas, individuals also often hold scripts for many social interactions. Scripts are another type of schema and are a mental layout for how an interaction should unfold (e.g., eating a meal in a restaurant) and include roles, props, and information about the sequence of events in a situation. Schemas, including role schemas and scripts are learned through experience or other learning (e.g., information from the media, information from members of one's social network). According to Baldwin (1992), people derive scripts from previous experience and then apply them when they encounter similar situations. For instance, a person may have a specific script, and therefore expectations, for how a meal in a restaurant may unfold based on previous experiences with eating in restaurants. People also make errors in processing information based on these scripts, such as filling in gaps in information based on their previous experiences with a similar situation. These scripts have procedural and declarative elements. The procedural aspects guide the person through the behaviors of a particular encounter and the declarative aspects of the script help the person understand the meaning of the particular encounter (Baldwin, 1992).

Women may hold specific scripts for a visit to an OB-GYN provider based on a previous visit to their providers and this may shape their expectations and, in turn, their satisfaction with

providers if these expectations are not met. Women may have scripts for a visit to an OB-GYN that vary with provider sex. For instance, scripts for an OB-GYN visit with a male provider may naturally include the use of a chaperone and this part of a visit may not be present in the scripts for visits with a female provider. As a result, increased privacy may be an implicit part of a script for a female OB-GYN. If women prefer a more private encounter (e.g., one without a chaperone) and their script for a female OB-GYN includes increased privacy, they may be more likely to choose a female OB-GYN.

People's schemas are likely to be activated when they enter certain situations, such as a visit to an OB-GYN. When individuals ascribe characteristics to a person prior to an encounter, they may then be more likely to remember those characteristics consistent with that conceptualization later on after the encounter (Zadny & Gerard, 1974). For instance, if part of a woman's schema for female physicians is that they are naturally knowledgeable about women's healthcare issues as the result of being women, she may be more likely to remember the knowledgeable and skilled behavior of a female physician. In turn, she may then be highly satisfied with this physician, having remembered mostly positive behaviors from her visit. Baldwin (1992) states that schemas specifically affect recall, and thus people are more likely to recall schema consistent rather than schema inconsistent behavior. In fact, Ruble and Stagnor (1986) point out "the vast majority of studies indicate that individuals have greater difficulty remembering gender-inconsistent relative to consistent information" (p. 251). Role schema and scripts can be useful when examining the findings from literature on satisfaction, as well as preference. If women have schemas that include the idea that female OB-GYNs will be more understanding about women's health issues or have more humanistic qualities (e.g., a good bedside manner), it naturally follows that they would exhibit a preference for a female OB-GYN.

Conversely, women may hold schemas for male OB-GYNs that contain negative information, such as the idea that male OB-GYNs are weird or awkward, not well versed in women's healthcare issues, or cold and detached. As a result, women may both exhibit a preference for a female over a male provider, and be less satisfied with their care with a male provider as they are likely to interpret their interactions with male providers in these negative schema-consistent ways.

Based on role schemas, scripts, and associated preferences, it is also possible that women may be interacting with their healthcare providers in a different way. Women may have expectations based on their schemas and therefore act accordingly with these expectations. For instance, if part of a woman's schema for female OB-GYN providers is that they are more nurturing and understanding than male OB-GYNs, she may interact with OB-GYNs in specific ways based on these beliefs. She might attend to nurturing behaviors from female providers and reinforce these behaviors. She may consequently ignore nurturing behaviors from male OB-GYNs and they may then go without reinforcement from the patient, which would decrease their future likelihood. As a result, expecting a more nurturing provider in a female may actually create a more nurturing provider. These particular schemas may be reinforced at an institutional level when men are being given the message that there is no place for them in OB-GYN.

Relationship of Literature to the Current Study

There is no doubt when examining the current literature that there is a problem of declining access to care from OB-GYN practitioners. Women are losing access to care for a variety of reasons – litigation and economics as well as practice concerns. Additionally, the problem is compounded by the fact that men are far less frequently selecting OB-GYN as a specialty, leading to a steeper decline in providers. Even when men do select OB-GYN, they

may opt out of the field later in order to pursue other specialties or may choose to sub-specialize (e.g., in gynecological oncology). There is also evidence that declining numbers of men entering OB-GYN may be fueled by the fact that women often exhibit a preference for seeing a female provider and may be more satisfied with the care they receive from female providers. However, there are some limitations to the current literature. There has been little direct measurement of the mechanisms that may explain women's preference for females as their OB-GYN providers. Role schemas as they relate to gender and OB-GYN relationships have not yet been specifically explored. Additionally, the impact of role schemas on satisfaction with physician patient interactions has not been assessed. Thus, the current study seeks to address this gap by examining the content of women's role schemas for male and female OB-GYNS and the influence of role schemas on women's ideas about, and satisfaction with, male and female OB-GYN providers using an experimental methodology.

Goals of the Current Study

The current study had two primary goals. The first goal was to examine the content of women's gender related role schemas and scripts as they relate to OB-GYNs. To achieve this goal, a qualitative study was conducted where female university students were randomly assigned to describe the characteristics held by female or male OB-GYNs and to describe what happens during a typical gynecological visit to a male or female provider. The second goal was to examine the influence of role schema and scripts on women's satisfaction with OB-GYN providers and ideas regarding providers. To achieve this goal, university women were randomly assigned to listen to fictional audio taped interactions of OB-GYN providers (either male or female) engaging in either male gender schema consistent or female gender schema consistent

behaviors. Participants' theoretical satisfaction with, and perception of the qualities of the providers were evaluated.

Chapter II

Study One

Participants

A total of 104 college women were recruited from the online research management website of the Psychology Department at East Carolina University. Eight participants were excluded from analyses because they wrote about the incorrect provider sex, did not use sex specific terms in their provider descriptions (i.e., he/she), or did not follow directions in other ways, leaving a final sample of 96 participants. Participants were between the ages of 18 and 21 years, with a mean age of 18.6 years. The majority of participants self-identified as European American (60.4%). A total of 28.1% of participants self-identified as African American, 7.3% as Latina and 4.2% as multi-ethnic. The participants were mostly freshman (65.6%), followed by sophomores (27.1%), and juniors (7.3%).

Materials and Procedures

Participants were recruited from the ECU Psychology Department online research participation website to participate in a study focused on understanding women's ideas about their experiences with health care providers, including obstetrician gynecologist (OB-GYNs) providers and primary care physicians. Participants completed the study in small groups of 2 to 6 in a classroom. Trained undergraduate lab assistants and the author served as experimenters.

After signing informed consent (see Appendix B), participants were instructed to write about their ideas regarding the characteristics of either male or female OB-GYNs and primary care providers, as well as their ideas about a typical visit to these providers. Women were randomly assigned to write about male or female OB-GYNs and male or female primary care providers and the order in which providers were presented (i.e., primary care first or OB-GYN

first) was counter balanced. Participants were asked to write about primary care physicians to attempt to disguise the full intent of the study and thus reduce reactance.

The instructions that were given to participants were as follows:

We are interested in hearing your ideas regarding healthcare providers and experiences. Please respond to the following questions. Be sure to read the prompts carefully. You will have 17 minutes for each of the first two sections. If you finish early, you will not be able to move on to the next section. We are interested in your ideas, so even if you have not had a specific experience, write about your ideas about that experience.

Participants were prompted to write about the attributes of the specific type of healthcare provider first. They were then prompted to provide a script for a typical visit to that type of healthcare provider. Participants were administered the first set of prompts (either primary care provider or OB-GYN provider) in their assigned sex and then were administered the second set of prompts. Finally, participants were administered a demographic questionnaire (Appendix D). The demographic questionnaire included questions regarding age, ethnicity, academic standing, OB-GYN sex preference, experience with an OB-GYN and reasons for preferences for OB-GYN providers. These questions were adapted from reviews of the literature including questionnaires assessing patient satisfaction and reasons for choosing a physician (Mavis et al., 2005; Zuckerman et al., 2002). The prompt for OB-GYN providers are listed below:

We are interested in learning about women's perceptions of healthcare providers. In the space below, please describe the characteristics of what you would consider the typical MALE/FEMALE obstetrician gynecologist physician. (For instance, the person you would go to see for well woman's care or gynecological problems). Please be as detailed and descriptive as you can.

We are interested in learning about women's perceptions of healthcare processes. In the space below, please describe what happens during a typical visit to a MALE/FEMALE obstetrician gynecologist physician (the person you would go to for well woman's care or gynecological problems). Please include as much detail as possible about what happens from the start of the visit to the end, including the thoughts, feelings, and behaviors of the individuals involved.

Participants had 17 minutes to complete each description of provider attributes and the visit script. They were not allowed to move on to the next prompt if they finished early to encourage full participation. Participants received one hour of research credit for their participation.

Analysis Plan

Before conducting analyses, the OB-GYN attribute description data was coded by trained undergraduate raters and the author. To conduct the coding, participants' responses were examined for themes in descriptions of OB-GYN attributes and coding categories were created. To develop the coding categories, all written responses were read by undergraduate raters (trained by the author) and the author herself, who developed lists of coding categories. The author then created a master list of coding categories (collapsing duplicate categories into a single category as necessary) using the coding categories created. Next, each participant's data were rated by two separate raters for the presence or absence of each attribute category and inter-rater reliability was calculated. After calculating inter-rater reliability, discrepancies in ratings were resolved by the author. Pearson chi square tests were then conducted to compare each attribute category for significant differences (presence or absence of attribute) between sex conditions. Based on the exploratory nature of the current study Bonferroni corrections were not employed.

A slightly different process was used to code the OB-GYN visit scripts. Data were first examined for descriptions of potentially relevant events which occurred during the visit to an OB-GYN, and coding categories were created. Written responses were read by the author and Dr. Heather Littleton to generate an initial list of coding categories, based on script elements that occurred in multiple scripts. Then, each participant's data were rated by two separate raters for the presence or absence of each script element and inter-rater reliability was calculated.

Discrepancies in ratings were resolved by the author. Pearson chi square tests were used to compare each script element for significant differences between sex conditions.

Recruiting 96 women resulted in 48 women in each group, which allowed for sufficient power to detect medium to large effect size differences in attribute or visit script ratings. Specifically, forty-eight pairs resulted in approximately 80% power to detect a medium effect size difference in proportion with alpha set at .05 (Cohen, 1988).

Results

Demographics and Experience with OB-GYN Providers As stated previously, participants were between the ages of 18 and 21 years, with a mean age of 18.6 years. The majority of participants self-identified as European American. The participants were mostly freshman, followed by sophomores, and juniors. Ethnic minority women were somewhat over-represented when compared to the university population as a whole (approximately 40% of participants were ethnic minorities in our study versus approximately 25% in the university population; East Carolina University, 2007). Demographic information is summarized in Table 1. Most of the women who participated in the study had previously seen an OB-GYN and 77.1% of participants endorsed currently having an OB-GYN provider (see Table 1).

Table 1

Participant Demographics

	Percentage (n)
Age	
18	52% (50)
19	33% (32)
20	11% (11)
21	3% (3)
Ethnicity	
European American	60% (58)
African American	28% (27)
Latina	7% (7)
Multi ethnic	4% (4)
Academic Standing	
Freshman	66% (63)
Sophomore	27% (26)
Junior	7% (7)
Age at First OB-GYN Appointment	
Under 18	55% (53)
Over 18	38% (31)
Never	12% (12)
Currently Have OB-GYN	
Yes	77% (74)
No	23% (22)
Sex of OB-GYN (Current)	
Male	17% (16)
Female	60% (58)
Years Since Last Visit To OB-GYN	
0 (Current year)	55% (53)
1	31% (30)
2	1% (1)

OB-GYN Sex Preferences. Approximately 78% of participants endorsed a preference for a female OB-GYN. No preference was reported by 17% of participants. Finally, 4% of participants endorsed a preference for a male OB-GYN. It should be noted that no participants endorsed a strong preference for a male OB-GYN. Participants' preferences are summarized in Table 2.

Table 2

Women's Reported Sex Preference for OB-GYN Providers

Preference	Percentage (n)
Strongly prefer female	59.4% (57)
Prefer female	17.7% (17)
No preference	16.7% (16)
Prefer male	4.2% (4)
Strongly prefer male	0% (0)

OB-GYN Attribute Preferences. Participants were asked to choose the attributes that were most important to them in choosing an OB-GYN from a list provided and were asked to choose three total attributes, numbering them one, two, and three, with one representing the most important attribute. Participants could also write in additional attributes if a particular attribute was not included on the list. Missing data on these items were substantial, ranging from 27 to 30%. It is possible that confusion over directions may have led to the high levels of missing data. For example, some participants put check marks for their preferred characteristics rather than indicating the order of their preferences. Examining participants' responses across the three items, 34% of women endorsed "explains things clearly" as one of their preferred characteristics. "Is female" and "easy to talk to" were both also frequently endorsed characteristics with 32 and 30% of women endorsing them, respectively. It should be noted that none of the participants endorsed "is male" or "non emotional" as important attributes for their decision making process. The attributes chosen by participants as their first, second, and third most important attribute in an OB-GYN provider, and the percentage endorsing each attribute overall, are summarized in Table 3. Of note, participants who chose the "other" option most often endorsed choosing the

same OB-GYN as family members, wrote in a reason that restated an answer choice (e.g., “good hours”) or left the space blank.

Table 3

Women’s Reported Desirable Attributes for OB-GYN Providers

Attribute	Most important attribute	Second most important attribute	Third most important attribute	Total who endorsed attribute
	% <i>n</i>	% <i>n</i>	% <i>n</i>	% <i>n</i>
Explains things clearly	8.3 (8)	8.3 (8)	17.7 (17)	34.3 (33)
Is female	20.8 (20)	4.2 (4)	7.3 (7)	32.3 (31)
Easy to talk to	6.3 (6)	12.5 (12)	11.5 (11)	30.3 (29)
Respectful	6.3 (6)	11.5 (11)	3.1 (3)	20.9 (20)
Has a good reputation	8.3 (8)	5.2 (5)	4.2 (4)	17.7 (17)
Caring	3.1 (3)	7.3 (7)	6.3 (6)	16.7 (16)
Accessibility	5.2 (5)	5.2 (5)	5.2 (5)	15.6 (15)
Gives me lots of information	3.1 (3)	1.0 (1)	8.3 (8)	12.4 (12)
Understands women	0.0 (0)	8.3 (8)	3.1 (3)	11.4 (11)
Listens to me	2.1 (2)	5.2 (5)	2.1 (2)	9.4 (9)
Other	6.3 (6)	2.1 (2)	1.0 (1)	9.4 (9)
Takes charge of my health	2.1 (2)	1.0 (1)	0.0 (0)	3.1 (3)
Missing/Un-codable response	28.0 (27)	28.0 (27)	30.0 (29)	

Provider Attributes. Review of the provider attributes resulted in a final coding list consisting of 51 attributes. Coding of each description by two raters using this list was then conducted. Inter-rater reliability averaged 96%. Attributes which were not present in at least 15% of the descriptions of either male or female OBGYNs were excluded from the analyses as likely not central attributes of participants’ schemas, resulting in a final list of 15 attributes. A traditional cutoff has been reported of 25% (Bower, Black, & Turner, 1979; Rose & Frieze, 1993). However, 15% was used in the current study as a conservative cutoff. These attributes are listed in Table 4. Statistically significant differences in frequency of reported attributes by OB-GYN sex occurred for both knowledgeable, and easy to talk to with these attributes being significantly more likely to be present in the descriptions of female OB-GYNs. Also,

descriptions of female OB-GYN providers were more likely to include describes procedures (i.e., a pelvic or breast exam) conducted by the provider during the visit. Additionally, male OB-GYNs were significantly more likely to be described as awkward than female OB-GYNs.

Results of the chi square analyses comparing the frequency with which descriptions of male and female OB-GYN provider attributes included each coded attribute are summarized in Table 4.

Table 4

Participant Descriptions of OB-GYN Provider Attributes Stratified by OBGYN Sex Condition

Attribute	Male Providers		Female Providers		χ^2
	%	<i>n</i>	%	<i>n</i>	
Comforting	42.0	(20)	48.0	(23)	0.4
Knowledgeable	8.3	(4)	29.2	(14)	6.8*
Awkward	20.8	(10)	0.0	(0)	11.2**
Experienced	20.8	(10)	10.4	(5)	2.0
Good personality	16.7	(8)	22.9	(11)	0.6
Kind	18.8	(9)	27.1	(13)	1.0
Professional	25.0	(12)	14.6	(7)	1.6
Describes procedures	10.4	(5)	27.1	(13)	4.4*
Easy to talk to	4.2	(2)	22.9	(11)	7.2*
Gentle	12.5	(6)	18.8	(9)	0.7
Caring	14.6	(7)	16.7	(8)	0.1
Non-judgmental	8.3	(4)	20.8	(10)	3.0
Empathic	10.4	(5)	16.7	(8)	0.8
Appropriate	16.7	(8)	10.4	(5)	0.8
Informative	6.2	(3)	16.7	(8)	2.6

* $p < .05$. ** $p < .01$.

Provider behaviors during a visit. Coding of participants' scripts regarding what happens during a typical OB-GYN visit resulted in a final list of 18 script elements (see Table 5). Inter-rater reliability of the coding of these script elements averaged 93%. Scripts of male providers were more likely to include the use of a chaperone by the provider, and making small talk by the provider. Results of chi square analyses comparing the frequency with which provider behaviors were included in the descriptions of male and female OB-GYNs are summarized in Table 5.

Table 5

Participant Descriptions of Behaviors Included in a Typical Visit to an OB-GYN Stratified by Provider Sex Condition

Behavior	Male Provider		Female Provider		χ^2
	%	(n)	%	(n)	
Vaginal exam is performed	50.0	(24)	63.0	(30)	1.9
Breast exam is performed	27.1	(13)	20.8	(10)	0.4
Physician asks questions about sexual activity	20.8	(10)	29.1	(14)	1.0
Physician engages in reassuring behaviors	25.0	(12)	20.8	(10)	0.2
Physician asks questions about birth control	16.7	(8)	18.8	(9)	0.1
Physician gives patient a sheet to cover up with	22.9	(11)	12.8	(6)	1.7
Physician explains exam	12.5	(6)	22.9	(11)	1.9
Physician makes small talk	25.0	(12)	8.3	(4)	4.6*
Physician introduces self	12.5	(6)	6.2	(3)	1.0
There is a chaperone in room during exam	18.8	(9)	2.1	(1)	7.0*
Physician talks to patient in separate office	10.4	(5)	4.3	(2)	1.3
Physician makes special effort to be gentle	8.3	(4)	6.2	(3)	0.1
Physician does not explain exam	12.5	(6)	8.3	(4)	0.4
Physician asks questions about STDs	0.0	(0)	4.2	(2)	2.1
Physician shakes patient's hand	2.1	(1)	4.2	(2)	0.4
Physician hugs patient	0.0	(0)	2.1	(1)	1.0
Physician feels uncomfortable	2.1	(1)	2.1	(1)	0.0
Physician comments on physical appearance of patient	2.1	(1)	0.0	(0)	0.3

* $p < .05$.

Chapter III

Study Two

Participants

A total of 136 college women were recruited from the online research management website of the psychology department at East Carolina University to participate in the study. Ten participants were excluded from analyses because they incorrectly identified the sex of the provider in the narrative, heard mixed provider narratives (one male narrative and one female narrative) due to a technical problem, or did not follow directions, leaving a final sample of 126 participants. Participants were between the ages of 18 and 46 years, with a mean age of 19.7 years. The majority of participants self-identified as European American (64.3%). A total of 23.0% of participants self-identified as African American, 3.2% as Latina and 2.4% as multi-ethnic.

Procedures

Participants were recruited to participate in a study regarding satisfaction with healthcare providers via the ECU psychology department research management website. Participants arrived at the study location (a classroom) and the informed consent form was reviewed (Appendix E). Experimenters were the author and trained undergraduate research assistants. Women participated in small groups of between 2 and 6. Participants were assigned to listen to audio narratives of either male or female OB-GYNs. They listened to two recordings, presented in counter-balanced order, one in which the physician engaged in male gender schema consistent behaviors and one in which the physician engaged in female gender schema consistent behaviors. Scripts for these audio-recorded narratives were constructed based on the results of study one. These scripts are included in Appendix F. The instructions given to participants prior to listening to each narrative were as follows:

Please listen to the following portion of a fictional appointment with an OB-GYN physician. You will be asked some questions regarding your thoughts about the appointment after the recording is over. As you listen to the narrative, imagine that you are the patient in the recording.

After participants listened to each audio-recorded narrative, they were asked to respond to items regarding their beliefs about the attributes of the provider they heard, their hypothetical satisfaction with the provider if the participant had seen him or her for an OB-GYN visit, and their likelihood of seeing that provider again. Finally, they were administered a demographic questionnaire. Participants received one hour of research credit for their participation.

Materials

Provider Scripts. Provider scripts used for the audio-recorded narratives were created by the author and Dr. Heather Littleton based on the results of study one. Two scripts were created, one in which the provider engaged in behaviors consistent with participants' ideas regarding female providers and one in which the provider engaged in behaviors consistent with participants' ideas regarding male providers. Participant responses regarding both provider attributes (that related directly to events during an OB-GYN visit) and responses regarding the detailed script of an OB-GYN visit were used to develop the provider scripts. Both scripts contained basic descriptions of a typical visit to an OB-GYN for well woman care by a college-aged patient. The visits included a breast and pelvic exam as well as discussions of birth control and STDs. Responses from the study one narratives in which male and female providers differed were included in the creation of the audio-recorded scripts for study two. The female schema consistent script was written with an emphasis on description of procedures by the provider, the provider being knowledgeable about women's health issues and the provider being easy to talk to about concerns. For instance, in the female consistent script, the provider begins the visit by explicitly asking the patient if she had any questions she needed to discuss. The female

consistent script also contained explanations using the physician's knowledge of the proper way to use condoms to prevent STDs. Additionally, the female consistent provider explicitly described the procedures in the pelvic exam prior to beginning the exam. The male script was written with an emphasis on the provider being awkward, making small talk, and using a chaperone. The male consistent provider script included the use of "ummm" as an indicator of awkward interaction, included small talk about the weather and the patient's job, and explicitly included the use of a chaperone as well. The individuals in the audio-recorded narratives were three college student with acting experience, as well as one physician. All actors were in their 20's. Efforts were made for the visit content of the male and female schema consistent scripts to be similar in both conditions. Provider scripts are included in Appendix F.

Provider Attributes. After participants listened to each of the audio-recorded narratives, they were asked to rate the provider on nine attributes derived from main themes seen in the narratives from study one. Specifically, participants were asked to rate the qualities of the OB-GYN provider in the narrative on seven-point bipolar scales anchored by a positive attribute on one end of the scale, and the opposite negative attribute on the other end of the scale (e.g., knowledgeable-uninformed). Participants' scores on these items were summed to give an overall attribute score with lower scores indicating more positive appraisals of the attributes of the provider. The items administered are listed in Appendix G.

Patient Satisfaction. After listening to each narrative, participants were asked to rate their satisfaction with the hypothetical provider. Six questions on satisfaction were adapted from the Health Resources and Services Administration Patient Satisfaction Survey (HRSA, 2010). The questions were chosen based on their application to patient provider interactions. Participants were instructed to "imagine you are the patient in the narrative you just heard." They were then

asked to rate how well the provider performed several behaviors during the visit using a seven-point Likert scale bounded by 1 (*very poor*) and 7 (*superior*). A sample item is “the provider listened.” Participants’ scores on these items were summed to give an overall satisfaction score with higher scores indicating more positive appraisals of the satisfaction with the provider. The full questionnaire is provided in Appendix G.

Provider Utilization. After listening to each narrative, participants were asked to rate how likely they would be to see the hypothetical provider they had just heard again. Specifically, participants were asked “On a scale of 1-7, if this was your OB-GYN, how likely would you be to see this provider again?” The Likert scale administered was bounded by 1 (*very unlikely*) and 7 (*very likely*).

Additional measures. Open-ended questions were administered to assess perceived strengths and weaknesses of the providers in the recordings. Specifically, participants were asked, “What were this OB-GYN provider’s strengths?” and “What were this OB-GYN provider’s weaknesses?” Participants were also asked if the provider they heard was male or female as a means of checking the success of the experimental manipulation. Finally, demographic information, including participants’ experiences with OB-GYN providers was gathered. The demographic questionnaires included questions assessing the participants’ reasons for choosing an OB-GYN physician. These questions were adapted from reviews of the literature including questionnaires reporting patient satisfaction and patients’ commonly reported reasoning for choosing a physician (Mavis et al., 2005; Zuckerman et al., 2002). The demographic questionnaire can be found in Appendix H.

Analysis Plan

To compare participant ratings of the physician characteristics, provider satisfaction, and provider utilization across conditions, three, 2 (provider sex) x 2 (male schema consistent or female schema consistent) mixed factor ANOVAs were conducted. For these analyses, sex was a between subjects factor and male schema consistent versus female schema consistent behavior was a within subjects factor. A power analysis was conducted to evaluate the power of the analyses to detect medium sized effects ($f = .25$). For this analysis, the alpha level was set at .05. Results supported that the power to detect both main effects (sex and male schema consistent versus female schema consistent behavior) was approximately 80%. Power to detect the interaction effect of sex and male schema consistent versus female schema consistent behavior was approximately 80% as well (Cohen, 1988).

Results

Demographics and experiences with OB-GYN providers. As previously stated, participants were between the ages of 18 and 46 years, with a mean age of 19.7 years. The majority of participants self-identified as European American. A total of 23.0% of participants self-identified as African American, 3.2% as Latina and 2.4% as multi-ethnic. Ethnic minority women were somewhat over-represented when compared to the university population as a whole (approximately 35% of participants were ethnic minorities in our study versus approximately 25% in the university population; East Carolina University, 2007). The participants were mostly freshman, followed by sophomores, juniors, and seniors. Most of the women who participated in the study had previously seen an OB-GYN and 72.1% of participants endorsed currently having an OB-GYN provider. Participant demographics are summarized in Table 6.

Table 6

Participant Demographics

	Percentage (<i>n</i>)	
Age		
18	22%	(28)
19	45%	(57)
20	13%	(17)
21	8%	(10)
22	5%	(6)
Over 22	5%	(7)
Ethnicity		
European American	64%	(81)
African American	23%	(29)
Latina	3%	(4)
Multi-ethnic	2%	(3)
Academic Standing		
Freshman	55%	(69)
Sophomore	21%	(26)
Junior	13%	(16)
Senior	11%	(14)
Age at First OB-GYN Appointment		
Under 18	53%	(67)
Over 18	37%	(46)
Never	10%	(13)
Currently Have OB-GYN		
Yes	72%	(91)
No	28%	(35)
Sex of OB-GYN		
Male	8%	(10)
Female	66%	(83)
Years Since Last Visit To OB-GYN		
0 (Current year)	32%	(41)
1	47%	(59)
2	4%	(5)
3	1%	(1)

Provider Attributes. Participants' mean ratings of scores of provider attributes stratified by sex and schema consistency are summarized in Table 7. Scores were summed with a possible range from 7-63, with lower scores indicating more favorable ratings of provider attributes. Examining the results of the ANOVA comparing participant ratings of provider attributes, there was a significant main effect for schema consistency of the narrative, $F(1, 125) = 211.54, p <$

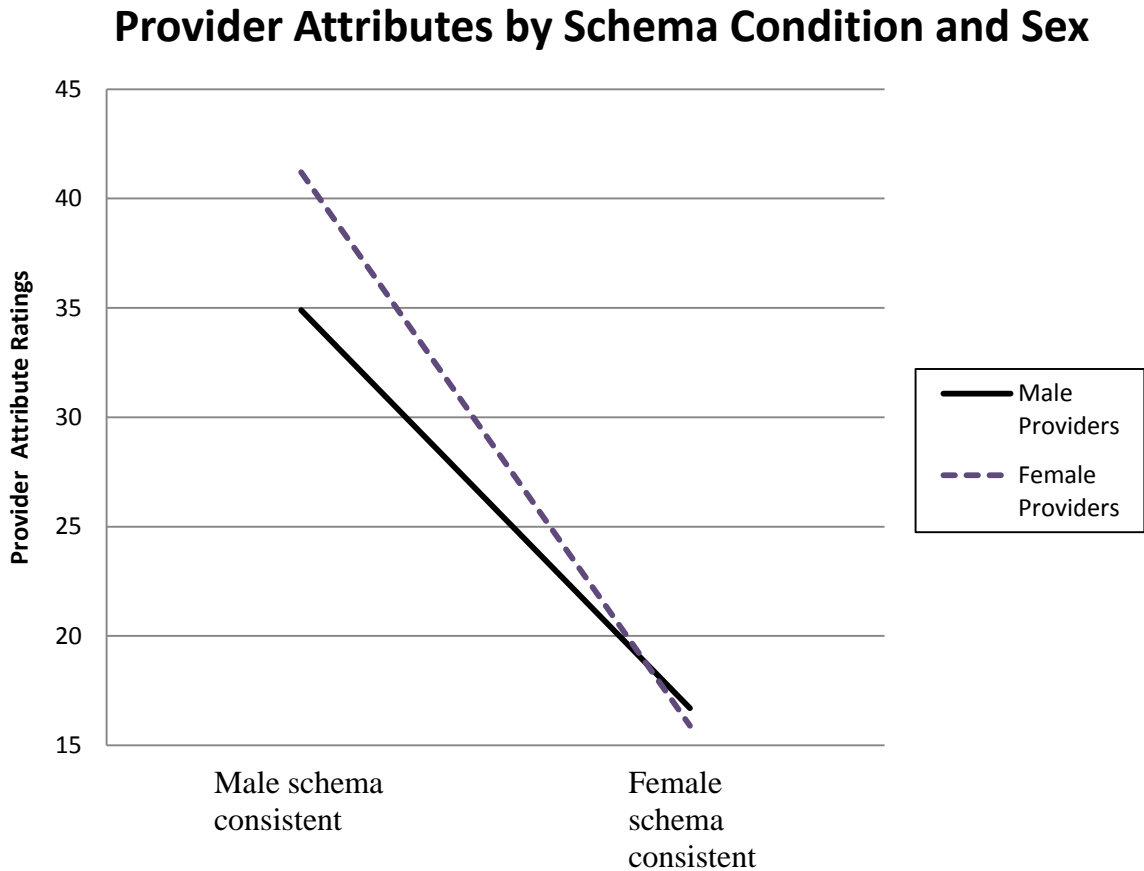
.001. In addition, there was a main effect for provider sex, $F(1, 125) = 7.04, p < .01$. Finally, the interaction term was also significant, $F(2, 124) = 5.62, p < .05$. Examination of the main effect for schema consistency revealed that providers who engaged in female schema consistent behavior were rated more positively overall than the providers who engaged in male schema consistent behavior. Examination of the main effect for sex revealed that male providers were rated more positively than female providers. To interpret the nature of the significant interaction, simple main effects of provider sex for male and female schema consistent scripts were examined. Results supported that females who engaged in male schema consistent behavior were rated as significantly more negatively than males who engaged in male schema consistent behavior, $t = 3.19, p < .01$. In contrast, no difference across sex was observed for the female schema consistent narratives $t = 0.49, p = .624$. The interaction between provider sex and schema consistency is depicted in Figure 1.

Table 7

Provider Attribute Ratings Stratified by Provider Sex and Schema Consistency

	Male Schema Consistent <i>M (SD)</i>	Female Schema Consistent <i>M (SD)</i>	Overall <i>M (SD)</i>
Male Provider	34.9 (10.7)	16.7 (8.8)	25.9 (6.2)
Female Provider	41.2 (11.4)	15.9 (9.7)	28.5 (5.4)
Overall	38.0 (11.4)	16.3(9.2)	_____

Figure 1: Interaction Between Provider Sex and Male and Female Consistent Scripts on Provider Attribute Ratings.



Patient Satisfaction. Participants' mean ratings of provider satisfaction stratified by sex and schema consistency are summarized in Table 8. Scores were summed and with a possible range from 6-42, with higher scores indicating higher satisfaction with providers. Examining the results of the ANOVA comparing participant ratings of satisfaction with providers, there was a significant main effect for schema consistency of the narrative, $F(1, 125) = 143.51, p < .001$. There was not a significant main effect for provider sex, $F(1, 125) = 3.20, p = .08$. Finally, the interaction between provider sex and schema consistency was significant, $F(2, 124) = 4.18, p < .05$. Examination of the main effect for schema consistency revealed that participants reported that they would be more satisfied with the providers who engaged in female schema consistent behavior than the providers who engaged in male schema consistent behavior. To interpret the

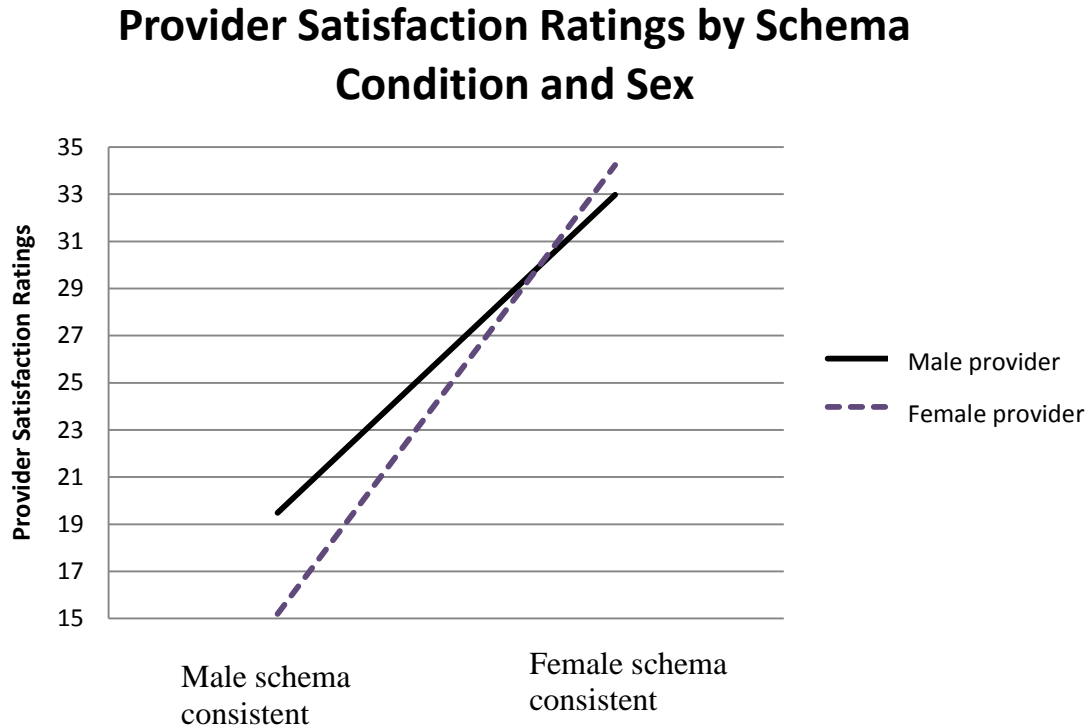
nature of the significant interaction, simple main effects of provider sex for male and female schema consistent scripts were examined. Results supported that participants were significantly less satisfied with females who engaged in male schema consistent behavior than male providers who engaged in male schema consistent behavior, $t = 2.68, p < .01$. In contrast, no difference across sex was seen for the female schema consistent behaviors, $t = 0.78, p = .428$. The interaction between provider sex and schema is depicted in Figure 2.

Table 8

Provider Satisfaction Ratings Stratified by Provider Sex and Schema Consistency

	Male Schema Consistent M (SD)	Female Schema Consistent M (SD)	Overall M (SD)
Male Provider	19.5 (8.5)	33.0 (9.1)	26.2 (4.3)
Female Provider	15.2 (9.4)	34.2 (8.8)	24.7 (0.84)
Overall	17.3 (0.8)	33.6 (0.8)	_____

Figure 2: Interaction between Provider Sex and Schema Inconsistent or Consistent Script on Provider Satisfaction Ratings



Provider Utilization. Participants' mean ratings on provider utilization stratified by sex and schema consistency are summarized in Table 9. Scores had a possible range of 1-7, with a higher score indicating a higher likelihood of future utilization. Examining the results of the ANOVA comparing participant ratings of provider utilization, there was a significant main effect for schema consistency of the narrative, $F(1, 125) = 211.54, p < .001$. There was not a significant main effect for provider sex, $F(1, 125) = 0.32, p = .57$. Finally, the interaction between provider sex and schema consistency was not significant, $F(2, 124) = 1.67, p = .20$. Examination of the main effect for schema consistency on provider utilization revealed that participants were significantly more likely to report they would utilize providers who engaged in

female schema consistent behavior than providers who engaged in male schema consistent behavior.

Table 9

Provider Utilization Stratified by Provider Sex and Schema Consistency

	Male Schema Consistent M (SD)	Female Schema Consistent M (SD)	Overall M (SD)
Male Provider	2.4 (1.7)	5.9 (1.4)	4.2 (0.7)
Female Provider	2.0 (1.4)	6.2 (1.6)	4.1 (0.8)
Overall	2.2 (0.1)	6.1 (0.1)	_____

Provider Strengths and Weaknesses.

A randomly selected sample of 40 responses to the questions regarding provider strengths and weaknesses were examined for themes in male schema consistent and female schema inconsistent responses. The providers in the female schema consistent conditions were likely to be described as helpful, willing to talk to the patient, willing to answer the patient's questions, and working to put the patient at ease. With regard to provider strengths, 52.5% of the sampled responses mentioned that the provider explained procedures to the patient, 37.5% of participants mentioned that the provider was helpful, 37.5% of participants mentioned the provider's willingness to answer questions, and 35.0% of participants provided responses that mentioned the provider putting the patient at ease. With regard to provider weaknesses, there were no consistently mentioned weaknesses across the sampled responses. Overall, this indicates that the participants saw the female schema consistent providers as was intended to be portrayed in the narrative.

The responses from the male schema consistent condition were also consistent with the intended depiction. These responses from the male schema consistent condition provided a

picture of an OB-GYN who is awkward, unskilled, judgmental, and does not put the patient at ease. With regard to provider strengths, 62.5% of participants wrote about the provider as talking to the patient about unrelated matters to put her at ease. This increased use of small talk may then have come across in the audiotaped narratives as an attempt to be comforting. With regard to provider weaknesses, 47.5% of participants described the provider as technically unskilled, 31.0% of participants described the provider as judgmental, 25% of participants described the provider as awkward, and 25% of participants described the provider not listening or not asking questions of the patient. It is of note that responses in both conditions included criticisms regarding lack of options for birth control, lack of information regarding sex, and lack of options for additional treatments. Thus, realism of these aspects of the narratives could have been improved.

Chapter IV

Discussion

Results of study one, examining the content of women's schemas and scripts for interactions with male and female OB-GYNs, supported that women were more likely to describe female OB-GYNs in positive terms than male OB-GYNs. When writing about female OB-GYNs, women were more likely to describe the provider as being easy to talk to, being knowledgeable, and describing procedures during the visit. It is likely that being easy to talk to and knowledgeable are related concepts. Women appear to hold schematic ideas that female OB-GYNs are more knowledgeable about female anatomy and women's health issues, perhaps simply by virtue of being a woman themselves. This schematic content may also relate to the idea that female providers are easier to talk to during encounters. If women think that female providers are more knowledgeable about women's health issues, it follows that they may also find them easier to talk to about women's health issues. Participants were also significantly more likely to describe female providers than male providers as describing procedures to their patients. This suggests that perhaps women see female OB-GYNs as more likely to be gentle and take their time during procedures and understand patients' need for reassurance because they themselves have undergone gynecological exams. Women may also believe that female providers are more empathic and gentle overall and associate this with understanding of women's health issues. They may hold schematic content for females as more understanding of other people's pain and more gentle in interactions with others. Overall, these data paint the picture of a female OB-GYN who is facile and gentle in her job, easily and knowledgeably talks with patients, and interacts with the patient appropriately and compassionately during the examination.

In contrast, when writing about male OB-GYNs, participants were more likely than when describing females to include discussions of the physician being awkward, needing a chaperone, and making small talk. The concepts of a male physician who is awkward and engages in small talk fit easily together. For instance, it is possible that women conceptualize male OB-GYNs as feeling uncomfortable interacting with women about reproductive and sexual health care and make nonrelated small talk as a result. The inclusion of a chaperone during the scripts male OB-GYNs but not female OB-GYNs suggests that perhaps women believe that the encounter with a male OB-GYN could take on an inappropriate tone. This aspect of the script suggests that somehow male OB-GYNs need supervision, but female OB-GYNs do not. These data paint the picture of a male OB-GYN who is uncomfortable with the role of being an OB-GYN, less skilled in his work, and awkward in his interpersonal encounters.

In study one, 30% of women also reported easy to talk to as an important attribute when choosing an OB-GYN and 34% chose explains things clearly. It is of note that these two characteristics are the key characteristics on which schemas of male and female OB-GYNs differed. Thus, results supported that women view the attributes they associate with female OB-GYNs (i.e., being easy to talk to and explaining things clearly) as the most important attributes in choosing an OB-GYN. It is possible that when asked directly, women rely on their schematic ideas for female and male OB-GYNs and are therefore endorsing a preference for schematic ideas of female or male OB-GYNs, rather than the actual sex of their provider. Interestingly, women did not highly endorse understands women which may reveal that women do not explicitly view the empathic nature of communication with a physician as highly important in choosing an OB-GYN. In addition, participants were not more likely to associate female OB-GYNs with holding traits which may relate to empathy than male OB-GYNs. Instead, it appears

that women associate differences in tangible job performance (e.g., better communication) with being a female OB-GYN.

Not surprisingly given these differences in women's descriptions of male and female providers, when asked about their preferred preference for sex of an OB-GYN, 78% of women reported they that preferred a female OB-GYN. This finding reflects a stronger sex preference than has been reported in previous studies. In previous studies, roughly 50% of women reported preferring a female OB-GYN provider (Kerssens et al., 1997; Mavis et al., 2005; Zuckerman et al., 2002). In addition, 32% reported being female as one of their top three attributes in choosing an OB-GYN provider. The data reflects a somewhat increased importance given to provider sex in our study as compared to prior research. Zuckerman and colleagues (2002) reported that roughly 25% of women listed provider sex as part of their top three reasons for choosing an OB-GYN. It is possible that the stronger provider sex preference found in the current study can be attributed to the ages represented in our sample. Participants in the current sample ranged between 18 and 21 years. Thus, these women have always had a choice of provider sex when seeing an OB-GYN (rather than older women who may have only had the option to see a male OB-GYN when they were younger). Additionally, because participants may have recently gone to an OB-GYN for the first time, these women may be relying on their positive experience with a female OB-GYN (in contrast, they may have no experience with a male OB-GYN) in describing providers. Additionally, body image and adult sexuality may be highly salient concerns for women in the 18-21 year old age group. They may prefer to discuss these issues with a female OB-GYN, who they believe may be easier to talk to during a visit.

In study two, women again rated female schema consistent behaviors (being easy to talk to, describing procedures, being more knowledgeable) more positively. In fact, providers who

engaged in female schema consistent behaviors received more positive ratings with regard to provider attributes, participant satisfaction with the provider, and future provider utilization than providers who engaged in male schema consistent behavior. Thus, results supported that women strongly prefer seeing a provider who engages in the behaviors they associate with female OB-GYNs. Contrary to our data on sex preferences and published research regarding satisfaction with male OB-GYNs, in the female schema consistent condition, women reported satisfaction with male providers that was not significantly different from that of female providers. That is, when male OB-GYNs acted in female schema consistent ways, they were viewed as positively by participants as females who engaged in these behaviors. This supports that what women like (and may prefer) in an OB-GYN is the female schema consistent behavior they associate with these providers, not the actual sex of the physician.

In addition, when female OB-GYNs acted in male schema consistent ways, they were rated harshly and women expressed dissatisfaction with the care received. In fact, when female OB-GYNs engaged in male schema consistent behavior they were rated significantly more negatively than male OB-GYNs who engaged in the same behaviors. Thus, female OB-GYN providers who went against gender norms by engaging in male schema consistent behavior engendered stronger negative reactions than male OB-GYNs who acted in similar ways. Perhaps women expect a higher level of care by female providers and were then disappointed by the male schema consistent behaviors of females OB-GYNs. Thus, there was a greater mismatch between participants' expectations for the provider and the provider's actual behavior in the case of a female provider who acted in a male schema consistent manner than a male provider who acted in this way. This is consistent with previous literature reporting a negative effect for women in leadership positions who act in male schema consistent ways, such as adopting masculine

leadership styles or taking on a male dominated leadership role (Ayman & Korabik, 2010). According to Helgeson (2009), there may be a “backlash effect” for people who engage in schema inconsistent behavior. Therefore, the female OB-GYNs who went against gender norms likely engendered strong reactions both for going against gender norms and for acting in the male schema consistent ways that participants viewed negatively.

Similar findings held true for women’s assessment of their likelihood of seeing providers in the future. Women were much more likely to return to see the female schema consistent OB-GYNs (both male and female). Thus, women reported being just as likely to see male OB-GYN providers as female OB-GYNs when they acted in female schema consistent ways. Perhaps women are willing to see male OB-GYN providers when they act in preferred ways. However, like in the first study, when women in this study were asked about preference, 87% of women endorsed a preference for a female OB-GYN. Again, this suggests that participants prefer the characteristics and behaviors they associate with female OB-GYNs rather than the actual sex of the provider, given that participants expressed a willingness to see male OB-GYNs who acted in a female schema consistent manner.

Limitations

There are several limitations for the current studies that should be noted. First, the samples consisted of college aged women, largely European American freshman. Therefore, it is possible that these results do not generalize to other populations (age, race, education level, etc). However, these women are often in a position to make their first choices regarding an OB-GYN, so knowledge of their schemas and values is important. Additionally, only audio recorded narratives were used in the experimental manipulation. It is therefore possible that these results may not generalize to face-to-face interactions with providers. Specifically, in study two women

had to imagine that they were the patient in the interaction without the benefit of visual cues. Therefore, the realism of the experimental setting may have influenced results. In addition, since participants were not able to see the providers, a lack of visual cues may have reduced the salience of provider sex. However, the discrepant satisfaction data between male schema consistent and female schema consistent conditions suggest that women were able to imagine changes in their satisfaction with the two types of providers. Finally, the impact of additional variables on schema and preference were not evaluated in the current studies. For instance, the impact of ethnicity and age of providers was not examined.

Future Directions

Bearing these limitations in mind, the current studies lead to several new directions for further research. First, sex preferences and satisfaction should be investigated in additional populations. Populations with greater diversity in age, race, educational status and socioeconomic status should be considered. The impact of age and ethnicity of provider should also be assessed. For instance, does the assessment of male OB-GYNs as “awkward” still hold true if the provider is judged to be older and therefore likely more experienced? It would also be important to investigate satisfaction differences in age and ethnicity of providers. It is possible that women hold separate schemas for providers of different ages and ethnic backgrounds, in the same way they hold schemas for male and female providers. Finally, efforts should be made to increase realism in the experimental manipulations. For instance, perhaps women could see videotaped interactions, or research could be done during actual OB-GYN visits. Narratives could be written and video-taped (rather than audio-taped) for women to watch regarding an OB-GYN visit. This would be important in order to allow women to observe nonverbal behavior as well as increase the realism of the visit and increase the salience of the provider’s sex, ethnicity,

age etc. Alternatively, photographs of providers could be used to highlight the salience of provider sex, ethnicity, age etc. Satisfaction with providers could then be more fully evaluated.

Results of the current studies also have several clinical implications. First, results support that women are not necessarily unwilling to see a male OB-GYN provider or automatically less satisfied with care received from male providers. Women in the current studies endorsed strong preferences for female providers, but when satisfaction with actual providers was assessed, they did not show a differential endorsement of male and female providers. Therefore, prevailing notions that women only want to see female providers should be challenged. This should be kept in mind during the hiring of new OB-GYNs. Additionally, medical schools should be careful when counseling students regarding specialties. The possible notion that a male will not be successful in OB-GYN did not hold up in our studies. When men displayed female schema consistent behaviors, they were rated positively by participants. Therefore, efforts should be made to train OB-GYNs in these specific behaviors (allowing time for discussion in patient encounters, describing physical exam procedures, etc). If training programs adopt this view of training male students, there may be some reactance to this effort. For instance, being fast and spending less time talking to patients may be adaptive in today's medical arena. Providers who spend less time talking to patients may be able to see more patients and therefore have more income. However, our data clearly supports that women prefer providers who they associate with being easier to talk to during a visit. If women are unsatisfied with their providers, they may have fewer choices for another provider (due to lack of access issues with OB-GYN). In turn, this may cause them to forgo necessary OB-GYN services.

Notably, there have been some efforts to integrate this type of training into residency programs. Boudreau, Jagosh, Slee, Macdonald, & Stienert (2008) report that patients see

listening skills as an essential part of being a physician. Therefore they suggest that communication skills be added into current curriculums. However, this is not an easy task. In fact, the current literature points to the difficulty of teaching communication skills to both medical students and residents. For instance, Deveugele, Derese, Maesschalck, Willems, Van Driel, & De Maeseneer (2005) explicitly discuss the difficulty of this process and point to the importance of communication with patients. Additionally, the effort is being made to explicitly include communication training in OB-GYN residencies. For instance, the OB-GYN residency at the Robert Wood Johnson Medical School in New Jersey includes Interpersonal Communication as one of its main competencies for resident development. This becomes even more important when viewed together with patient satisfaction. If patients are endorsing more satisfaction when they are communicating with physicians who they feel are easy to talk to, the communication then becomes a tool to increase patient satisfaction and, in turn, patient adherence. Overall, training both male and female medical students in “female schema consistent” behaviors may serve to increase satisfaction with providers and increase the quality of care received by women as well as re-open the field of OB-GYN to all qualified individuals.

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Appendix A

Study One:



University and Medical Center Institutional Review Board

East Carolina University • Brody School of Medicine

600 Moyer Boulevard • Old Health Sciences Library, Room 1L-09 • Greenville, NC 27834

Office 252-744-2914 • Fax 252-744-2284 • www.ecu.edu/irb

Chair and Director of Biomedical IRB: L. Wiley Nifong, MD

Chair and Director of Behavioral and Social Science IRB: Susan L. McCammon, PhD

TO: Katherine Buck, MS, Department of Psychology, ECU, 104 Rawl Bldg.

FROM: UMCIRB

DATE: April 8, 2009

RE: Expedited Category Research Study

TITLE: "Women's Schemas Regarding Health Care Providers and Visits"

UMCIRB #09-0353

This research study has undergone review and approval using expedited review on 4/8/09. This research study is eligible for review under an expedited category because it is research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.). The Chairperson (or designee) deemed this **unfunded** study **no more than minimal risk** requiring a continuing review in **12 months**. Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The investigator must adhere to all reporting requirements for this study.

The above referenced research study has been given approval for the period of **4/8/09** to **4/7/10**. The approval includes the following items:

- Internal Processing Form (received 4/3/09)
- Announcement on Experimentrak
- Protocol (received 4/3/09)
- Informed Consent (received 4/3/09)
- Data Collection Forms

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

The UMCIRB applies 45 CFR 46, Subparts A-D, to all research reviewed by the UMCIRB regardless of the funding source. 21 CFR 50 and 21 CFR 56 are applied to all research studies under the Food and Drug Administration regulation. The UMCIRB follows applicable International Conference on Harmonisation Good Clinical Practice guidelines.

Study Two:



University and Medical Center Institutional Review Board

East Carolina University, 600 Moye Boulevard

1L-09 Brody Medical Sciences Bldg. • Greenville, NC 27834

Office **252-744-2914** • Fax **252-744-2284** • www.ecu.edu/irb

Chair and Director of Biomedical IRB: L. Wiley Nifong, MD

Chair and Director of Behavioral and Social Science IRB: Susan L. McCammon, PhD

TO: Katherine Buck, MS, LMFT-A, Dept of Psychology, ECU—Rawl 104

FROM: UMCIRB

DATE: March 31, 2010

RE: Expedited Category Research Study

TITLE: “Women's with Obstetrician Gynecologists”

UMCIRB #10-0168

This research study has undergone review and approval using expedited review on 3.26.10. This research study is eligible for review under an expedited category number 7. The Chairperson (or designee) deemed this **unfunded** study **no more than minimal risk** requiring a continuing review in **12 months**. Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to

the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The investigator must adhere to all reporting requirements for this study.

The above referenced research study has been given approval for the period of **3.26.10 to 3.25.11**. The approval includes the following items:

- Internal Processing Form (received 3.24.10)
- COI Disclosure Form (dated 3.18.10)
- Informed Consent (received 3.24.10)
- Questionnaire
- Male Schema Consistent
- Announcement on Experimentrak

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

The UMCIRB applies 45 CFR 46, Subparts A-D, to all research reviewed by the UMCIRB regardless of the funding source. 21 CFR 50 and 21 CFR 56 are applied to all research studies under the Food and Drug Administration regulation. The UMCIRB follows applicable International Conference on Harmonisation Good Clinical Practice guidelines.

Appendix B

CONSENT DOCUMENT

Title of Research Study: Women's schemas regarding healthcare providers and visits

Principal Investigator: Katherine Buck, M.S.

Faculty Sponsor: Heather Littleton, Ph.D.

Institution: East Carolina University

Address: Rawl 323

Telephone #: (252) 737-2774

INTRODUCTION

You have been asked to participate in a research study being conducted by Katherine Buck in the department of psychology at ECU. This research study is designed to be an investigation of women's ideas regarding their experiences with visits with different types of healthcare providers.

PLAN AND PROCEDURES

You will be asked to write about your ideas regarding various types of healthcare providers and typical characteristics they may have. You will also be asked questions about your ideas regarding a typical visit to different types of healthcare providers, including obstetricians-gynecologists (OB-GYNs) and primary care providers. You will also be asked questions about your experiences with different types of healthcare providers. Completing these questions should take approximately 45 minutes and you will receive one hour of research credit for completing the questions.

A total of 100 women will participate in the study.

POTENTIAL RISKS AND DISCOMFORTS

The primary risk to you is emotional discomfort as a result of completing study questions. The questions will involve describing in detail your ideas about typical visits to a primary care provider and OB-GYN. You will also be asked questions about your personal experiences with various types of healthcare providers.

You can choose not to answer any questions. You may also choose to withdraw from the study at any time. Please contact the study investigator if you wish to withdraw.

POTENTIAL BENEFITS

It is likely that you will not directly benefit from your participation. Information obtained from the research will potentially lead to a better understanding of women's healthcare issues.

ALTERNATIVE COURSES OF TREATMENT

You should be aware of area resources that can assist you with any issues that arise.

ECU Center for Counseling and Student Development

(252) 328-6661

Second floor of Wright Building, Room 316

Office hours 8-5 M-F

All ECU students can be seen for free; call the center to schedule an appointment.

Emergency walk-ins are seen on first come, first serve basis.

Hours for walk-in service: M 9-4, T 10-4, W-F 9-4

After regular business hours, you can reach the On-Call Counselor by contacting the ECU Police Department at 328-6150. The on-call counselor is available 365 days/year.

PARTICIPANT PRIVACY AND CONFIDENTIALITY OF RECORDS

All identifying information will be kept in the locked study laboratory in a locked filing cabinet.

LIMITS OF PARTICIPATION

You have the right to terminate your participation at any time. Please contact Katherine Buck (KSB0831@ecu.edu; (252) 737-2774) if you wish to terminate your participation. She can assist you with obtaining treatment if necessary.

COSTS OF PARTICIPATION

There are no known costs associated with participation in this study.

VOLUNTARY PARTICIPATION

Participating in this study is voluntary. If you decide not to be in this study after it has already started, you may stop at any time without losing benefits that you should normally receive. You may stop at any time you choose without penalty, loss of benefits, or without causing a problem with your academic program at this institution.

PERSONS TO CONTACT WITH QUESTIONS

The investigators will be available to answer any questions concerning this research, now or in the future. You may contact the primary investigator, Katherine Buck, at phone number, 252-737-2774. You can also contact the faculty sponsor, Dr. Heather Littleton at phone number, 252-328-6488. If you have questions about your rights as a research subject, you may call the Chair of the University and Medical Center Institutional Review Board at phone number 252-744-2914 (days). If you have a question about injury related to this research, you may call the ECU Risk Management Office at 252-328-2010.

CONSENT TO PARTICIPATE

I have read all of the above information, asked questions and have received satisfactory answers in areas I did not understand. (A copy of this signed and dated consent form will be given to the person signing this form as the participant or as the participant authorized representative.)

Participant's Name (PRINT) Time	Signature	Date
--	------------------	-------------

PERSON ADMINISTERING CONSENT: I have conducted the consent process and orally reviewed the contents of the consent document. I believe the participant understands the research.

Person Obtaining consent (PRINT)	Signature	Date
---	------------------	-------------

Principal Investigator's (PRINT)	Signature	Date
---	------------------	-------------

Appendix C

We are interested in learning about women's perceptions of healthcare providers. In the space below, please describe the characteristics of what you would consider the typical MALE/FEMALE obstetrician gynecologist physician. (For instance, the person you would go to see for well woman's care or gynecological problems). Please be as detailed and descriptive as you can.

[illegible]

We are interested in learning about women's perceptions of healthcare providers. In the space below, please describe the characteristics of what you would consider the typical MALE/FEMALE primary care physician. (For instance, the person you would go to see if you had the flu). Please be as detailed and descriptive as you can.

[illegible]

We are interested in learning about women's perceptions of healthcare processes. In the space below, please describe what happens during a typical visit to a MALE/FEMALE obstetrician gynecologist physician (the person you would go to for well woman's care or gynecological problems). Please include as much detail as possible about what happens from the start of the visit to the end, including the thoughts, feelings, and behaviors of the individuals involved.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Now, please describe what happens during a typical visit to a MALE/FEMALE primary care physician (the person you would go to see if you had the flu). Please include as much detail as possible about what happens from the start of the visit to the end, including the thoughts, feelings, and behaviors of the individuals involved.

[illegible]

Appendix D

We are interested in learning a little more about you. Please take a few minutes to complete the following questions.

1. How old are you? ____ years
2. How do you describe yourself?

<input type="checkbox"/> White (Caucasian/European American) <input type="checkbox"/> Latina <input type="checkbox"/> Black or African American <input type="checkbox"/> Caribbean Islander	<input type="checkbox"/> Native American <input type="checkbox"/> Asian American/Pacific Islander <input type="checkbox"/> Multi ethnic <input type="checkbox"/> Other (Please specify)_____
--	---
3. What is your current academic standing?

<input type="checkbox"/> Freshman <input type="checkbox"/> Sophomore <input type="checkbox"/> Junior	<input type="checkbox"/> Senior <input type="checkbox"/> Master's student <input type="checkbox"/> Doctoral student	<input type="checkbox"/> Other (Please specify)_____
--	---	--
4. What was your age at first visit to an obstetrician/gynecologist (OB-GYN)? _____ years
5. When was your last visit to an OB-GYN (MM/YYYY)? _____
6. When was your last visit to a physician (MM/YYYY)? _____
7. Do you currently have a primary care physician? ____ Yes ____ No
8. If you currently have a primary care physician, what is his/her gender? ____ M ____ F
9. Do you currently have an OB-GYN? ____ Yes ____ No
10. If you currently have an OB-GYN, what is his/her gender? ____ M ____ F
11. Please mark which sentence best describes your preference for the gender of your current primary care physician, if you have one.

<input type="checkbox"/> I strongly prefer to see a female primary care physician
<input type="checkbox"/> I prefer to see a female primary care physician
<input type="checkbox"/> I have no preference for a male or female primary care physician
<input type="checkbox"/> I prefer to see a male primary care physician
<input type="checkbox"/> I strongly prefer to see a male primary care physician.
12. Please mark which sentence best describes your preference for the gender of your current OB/GYN, if you have one.

<input type="checkbox"/> I strongly prefer to see a female OB/GYN

- ☐ I prefer to see a female OB/GYN
☐ I have no preference for a male or female OB/GYN
☐ I prefer to see a male OB/GYN
☐ I strongly prefer to see a male OB/GYN

13. Please mark the top three characteristics that best describe your main reasons for choosing your current primary care physician. (Please mark 1 for the most important characteristic, 2 for the second most important characteristic, etc)

- ☐ Explains things clearly
☐ Listens to me
☐ Is female
☐ Is male
☐ Caring
☐ Non emotional
☐ Has a good reputation
☐ Understands women
☐ Takes charge of my health
☐ Gives me lots of information
☐ Respectful
☐ Easy to talk to
☐ Accessibility (takes my insurance, location of practice, etc.)
☐ Other (Please specify) _____

13. Please mark the top three characteristics that best describe your main reasons for choosing your current primary care physician. (Please mark 1 for the most important characteristic, 2 for the second most important characteristic, etc)

- ☐ Explains things clearly
☐ Listens to me
☐ Is female
☐ Is male
☐ Caring
☐ Non emotional
☐ Has a good reputation
☐ Understands women
☐ Takes charge of my health
☐ Gives me lots of information
☐ Respectful
☐ Easy to talk to
☐ Accessibility (takes my insurance, location of practice, etc.)
☐ Other (Please specify) _____

Appendix E



East Carolina University

Informed Consent to Participate in Research

Information to consider before taking part in research that has no more than minimal risk.

Title of Research Study: Women's Satisfaction with Obstetrician Gynecologists

Principal Investigator: Katherine Buck, M.S., L-MFTA

Institution/Department or Division: Psychology

Address: 324 Rawl

Telephone #: 252-737-2774

Researchers at East Carolina University (ECU) study problems in society, health problems, environmental problems, behavior problems and the human condition. Our goal is to try to find ways to improve the lives of you and others. To do this, we need the help of people who are willing to take part in research.

The person who is in charge of this research is called the Principal Investigator. The Principal Investigator may have other research staff members who will perform some of the procedures. The person explaining the research to you may be someone other than the Principal Investigator. Members of Dr. Littleton's lab may be asking you to take part in this study.

You may have questions that this form does not answer. If you do, feel free to ask the person explaining the study, as you go along. You may have questions later and you should ask those questions, as you think of them. There is no time limit for asking questions about this research.

You do not have to take part in this research. Take your time and think about the information that is provided. If you want, have a friend or family member go over this form with you before you decide. It is up to you. If you choose to be in the study, then you should sign the form when you are comfortable that you understand the information provided. If you do not want to take part in the study, you should not sign this form. That decision is yours and it is okay to decide not to volunteer.

Why is this research being done?

The purpose of this research is to gain a better understanding of women's preferences for the behaviors of their healthcare providers. The decision to take part in this research is yours to make. By doing this research, we hope to learn how women's ideas about their healthcare providers are related to satisfaction with those providers.

Why am I being invited to take part in this research?

You are being invited to take part in this research because you have volunteered. If you volunteer to take part in this research, you will be one of about 120 people to do so.

Are there reasons I should not take part in this research?

There are no known reasons why you should not take part in this research.

What other choices do I have if I do not take part in this research?

You have the choice of not taking part in this research study. You can also choose not to take part in the research and you will receive course credit for any other research options that are open to you. You may discuss other alternatives with another professional, your minister, or your family.

Where is the research going to take place and how long will it last?

The research procedures will be conducted at the Rawl Building at East Carolina University. You will need to come to the Rawl Building one time during the study. The total amount of time you will be asked to volunteer for this study is 1 hour.

What will I be asked to do?

You are being asked to do the following:

You will listen to two audiotaped recordings of a fictional visit to a women's healthcare provider. You will then be asked to answer questions after the recordings regarding your satisfaction with the fictional provider as well as your ideas of their characteristics.

What possible harms or discomforts might I experience if I take part in the research?

There are always risks (the chance of harm) when taking part in research. It has been determined that the risks associated with this research are no more than what you would experience in a normal life.

However, some people react to things differently so it is important for you to tell us as quickly as possible if you experience any negative feelings, or feel sick.

Are there any reasons you might take me out of the research?

During the study, information about this research may become available that would be important to you. This includes information that, once learned, might cause you to change your mind about wanting to be in the study. We will tell you as soon as we can.

There may be reasons we will need to take you out of the study, even if you want to stay in. We may find that you are not or cannot come for your study visit as scheduled. If this is found to be true, we will need to take you out of the study.

What are the possible benefits I may experience from taking part in this research?

We do not know if you will get any benefits by taking part in this study. This research might help us learn more about women's ideas about healthcare. There may be no personal benefit from your participation but the information gained by doing this research may help others in the future.

Will I be paid for taking part in this research?

We will not be able to pay you for the time you volunteer while being in this study.

Who will know that I took part in this research and learn personal information about me?

To do this research, ECU and the people and organizations listed below may know that you took part in this research and may see information about you that is normally kept private. With your permission, these people may use your private information to do this research:

- Any agency of the federal, state, or local government that regulates human research. This includes the Department of Health and Human Services (DHHS), the Food and Drug Administration (FDA), the North Carolina Department of Health, and the Office for Human Research Protections

- The University & Medical Center Institutional Review Board (UMCIRB) and its staff, who have responsibility for overseeing your welfare during this research, and other ECU staff who oversee this research.

How will you keep the information you collect about me secure? How long will you keep it?

Information collected about you will be kept in a locked filing cabinet in a locked study office. Your name or other identifying information will not be kept on any of the responses that you provide.

What if I decide I do not want to continue in this research?

If you decide you no longer want to be in this research after it has already started, you may stop at any time. You will not be penalized or criticized for stopping. You will not lose any benefits that you should normally receive.

What if I get sick or hurt while I am in this research?

This study does not involve any risk greater than what you experience in everyday life. Therefore, we do not expect you to become sick or hurt as a result of being part of this research. However, people respond differently to things and sometimes accidents do happen. Therefore, if you need emergency care call 911 or for help. If possible, take a copy of this consent form with you when you go.

Call the Principal Investigator as soon as you can. He/she needs to know that you are hurt or ill. Call Katherine Buck at 252-737-2774.

If you believe you have been hurt or if you get sick because of something that is done during the study, you should call Katherine Buck at 252-737-2774 immediately. There are procedures in place to help provide care for you. Costs associated with this care will be billed in the ordinary manner, to you or your insurance company. However, some insurance companies will not pay bills that are related to research costs. You should check with your insurance about this. Costs that result from research-related harm may also not qualify for payments through Medicare or Medicaid. You should talk to the Principal Investigator about this, if you have concerns.

Who should I contact if I have questions?

The people conducting this study will be available to answer any questions concerning this research, now or in the future. You may contact the Principal Investigator at 252-737-2774. If you cannot reach someone directly, you may leave a message and someone will get back to you.

If you have questions about your rights as someone taking part in research, you may call the UMCIRB Office at phone number 252-744-2914 (days, 8:00 am-5:00 pm). If you would like to report a complaint or concern about this research study, you may call the Director of UMCIRB Office, at 252-744-1971.

Is there anything else I should know?

You should be aware of area resources that can assist you with any issues that arise.

ECU Center for Counseling and Student Development

(252) 328-6661

Second floor of Wright Building, Room 316

Office hours 8-5 M-F

All ECU students can be seen for free; call the center to schedule an appointment.

Emergency walk-ins are seen on a first come, first serve basis.

Hours for walk-in service: M 9-4, T 10-4, W-F 9-4

After regular business hours, you can reach the On-Call Counselor by contacting the ECU Police Department at 328-6150. The on-call counselor is available 365 days/year.

I have decided I want to take part in this research. What should I do now?

The person obtaining informed consent will ask you to read the following and if you agree, you should sign this form:

- I have read (or had read to me) all of the above information.
- I have had an opportunity to ask questions about things in this research I did not understand and have received satisfactory answers.
- I understand that I can stop taking part in this study at any time.
- By signing this informed consent form, I am not giving up any of my rights.
- I have been given a copy of this consent document, and it is mine to keep.

Participant's Name (PRINT)	Signature	Date
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Person Obtaining Informed Consent: I have conducted the initial informed consent process. I have orally reviewed the contents of the consent document with the person who has signed above, and answered all of the person's questions about the research.

Person Obtaining Consent (PRINT)	Signature	Date
---	------------------	-------------

Principal Investigator (PRINT)	Signature	Date
(If other than person obtaining informed consent)		

Appendix F

Scripts for Audio Narratives

MALE SCHEMA CONSISTENT:

Physician: Good morning, ma'am. I'm Doctor Smith. Doing ok this morning?

Patient: Yes, I'm fine, thank you.

Physician: Great, glad to hear you're doing well. It sure is beautiful outside today, isn't it. I am going to ask you some questions and then I'll bring in my nurse and we'll proceed with the exam.

Patient: Alright.

Physician: So, um, are you currently having any um sexual partners at the moment?

Patient: Yes, one now and two in the last year.

Physician: When was your last period?

Patient: About 2 weeks ago.

Physician: Well, uh, you need to be careful when you switch partners. That is a good way to get an STD. Well, we will do an STD test today. Ok, so I see that you are taking the birth control pill Yaz. Are you happy with your birth control options that you are using right now?

Patient: Well, yes, I think so.

Physician: Good, you know those commercials for birth control are everywhere nowadays. So, tell me what you like to do in your spare time.

Patient: Well, I like to do yoga and watch movies. I also really like to paint.

Physician: Great, that's good to hear. Do you, um, have any other questions before I go get my nurse?

Patient: No, I guess not.

Physician: Ok, well I'll go get my nurse, Sarah, and we'll get going.

(Physician leaves and re-enters the room with a nurse chaperone.)

Physician: Ok, Ms. Jones, lay back and I'll go ahead and do your breast exam. I'll, uh, make sure that there are not any abnormalities. (Pause for getting into position?) So, Ms. Jones, how are you doing in school??

Patient: Um, okay. Ouch.

Physician: (Nervous laugh), Sorry the exam can hurt a little. Glad you are doing uh, okay in school.

Patient: Um, thanks.

Physician: Ok, go ahead and slide on down to the end of the table. Please make sure to relax. You can cover up with this sheet.

Patient: Ok.

Physician: Well I'm glad to hear that school is going well. Do you have a job? Patient: Um, yeah, I work at a pizza place in town.

Physician: Great. I'm glad to hear it. It's important that people are happy in their everyday lives. Ok, we are all done here. Is there anything else that you need?

Patient: No, I don't think so.

Physician: Ok, well Sarah will be back with your prescriptions in just a moment. See you next year!

FEMALE SCHEMA CONSISTENT:

Physician: Good morning, I'm Dr. Williams. Welcome, I'm glad you're here today. How are you doing today?

Patient: I'm doing well, thanks.

Physician: Great, well today we'll talk a bit about your health first, then we'll move on to the exam. Is that alright?

Patient: Yes, that sounds fine.

Physician: So tell me, are you having any kinds of problems that you wanted to discuss with me today?

Patient: Well, I guess that I am having some cramps, right before my period starts.

Physician: Ok, some cramping right before your period. Has that changed at all recently?

Patient: No, it's always been like that, but I would like to see if there is anything to make that better.

Physician: Sure, that sounds like something we can work on. Because of the way that birth control pills work with your hormones, sometimes when women start taking birth control, cramps may decrease. I can see in your chart that you've never taken the pill before. Since you don't have any medical reasons why you shouldn't take birth control, we can start you on a prescription if you like. What do you think?

Patient: That sounds like it would be good.

Physician: How many sexual partners have you had in the last year?

Patient: 2

Physician: What kind of safe sex practices are you using?

Patient: Well, we use condoms most of the time.

Physician: When was your last period?

Patient: About 2 weeks ago.

Physician: Ok, well that's a great start. However, in order for condoms to be effective against pregnancy and disease transmission, they have to be used from the start, every time that you have sex, with every partner. When was the last time you were tested for sexually transmitted diseases?

Patient: About 4 months ago.

Physician: Well, we can test you again today if you would like.

Patient: Yeah, I think that is probably a good idea.

Physician: Sure thing. That's no problem. Anything else?

Patient: No, I don't think so.

Physician: Ok, well let's go ahead and do a breast exam. Have you noticed any changes in your breasts?

Patient: No, I haven't.

Physician: I will be feeling for any lumps, abnormalities, or discharge. Is that alright?

Patient: Yes

Physician: Ok, lay back and raise your arm. Good. Everything feels like it is normal with your breasts. Go ahead and slide down to the end of the table so we can start the pelvic exam. If you take some deep breaths and try to relax, this will help avoid discomfort.

Patient: Alright.

Physician: Ok, I am going to examine you externally, then I will insert my finger and press on your tummy a little to check on your cervix and ovaries, then I will insert the speculum to do the

Pap test and take some swabs to check you for any STDs. Ok, I'm going to start the exam now.
You're doing great, just make sure to try to relax.

Patient: Ok

Physician: (small amount of time passes) Good job. The hard part is over. You can sit back up.
Well, everything looks normal. I will send off your sample and you will hear back in about 1-2 weeks with your Pap test results. The STD tests we will have in a few days. If they are normal they will be mailed, otherwise we will call. Also, we'll make sure to get you that birth control prescription. Do you have any other questions or anything else that you need?

Patient: No, I don't think so. Thanks for all your help.

Physician: You're very welcome and we look forward to seeing you again.

.

Appendix G

Study 2 Questionnaire

Please circle the point that best describes your view of the personal qualities of the OB-GYN provider you just listened to.

Warm	☀	☀	☀	☀	☀	☀	☀	Cold
------	---	---	---	---	---	---	---	------

Knowledgeable	★	★	★	★	★	★	★	Uninformed
---------------	---	---	---	---	---	---	---	------------

Caring	☀	☀	☀	☀	☀	☀	☀	Uncaring
--------	---	---	---	---	---	---	---	----------

Open	✱	✱	✱	✱	✱	✱	✱	Reserved
------	---	---	---	---	---	---	---	----------

[illegible]

Relaxed	☀	☀	☀	☀	☀	☀	☀	Anxious
---------	---	---	---	---	---	---	---	---------

Helpful	☀	☀	☀	☀	☀	☀	☀	Unhelpful
---------	---	---	---	---	---	---	---	-----------

Talkative	☀	☀	☀	☀	☀	☀	☀	Quiet
-----------	---	---	---	---	---	---	---	-------

[illegible]

Imagine that you are the patient in the narrative that you just heard. Please rate how well the provider did the following on a scale from 1-7. (7 = Superior, 1 = Very poor)

The provider ...	Very poor	Poor	Fair	OK	Good	Great	Superior
Listened	1	2	3	4	5	6	7
Took enough time	1	2	3	4	5	6	7
Explained what women want to know	1	2	3	4	5	6	7
Gave good advice and treatment	1	2	3	4	5	6	7
Was friendly and helpful	1	2	3	4	5	6	7
Answered questions	1	2	3	4	5	6	7

On a scale of 1 – 7, if this was your OB-GYN, how likely would you be to see this provider again?

Very Unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely
1	2	3	4	5	6	7

What were this OB-GYN provider's strengths?

What were this OB-GYN provider's weaknesses?

Was the provider you just heard male or female? _____

Appendix H

We are interested in learning a little more about you. Please take a few minutes to complete the following questions.

1. How old are you? ____ years

2. How do you describe yourself?

____ White (Caucasian/European American)

____ Latina

____ Black or African American

____ Caribbean Islander

____ Native American

____ Asian American/Pacific Islander

____ Multi ethnic

____ Other (Please specify)_____

3. What is your current academic standing?

____ Freshman

____ Sophomore

____ Junior

____ Senior

____ Master's student

____ Doctoral student

____ Other (Please specify)_____

4. What was your age at first visit to an obstetrician/gynecologist (OB-GYN)? _____ years

5. When was your last visit to an OB-GYN (MM/YYYY)? _____

6. When was your last visit to a physician (MM/YYYY)? _____

7. Do you currently have an OB-GYN? ____ Yes ____ No

8. If you currently have an OB-GYN, what is his/her gender? ____ M ____ F

9. Please mark which sentence best describes your preference for the gender of your current OB/GYN, if you have one.

____ I strongly prefer to see a female OB/GYN

____ I prefer to see a female OB/GYN

____ I have no preference for a male or female OB/GYN

____ I prefer to see a male OB/GYN

____ I strongly prefer to see a male OB/GYN

10. Please mark the MOST important characteristic that you consider when choosing an OB-GYN.

- ___ Explains things clearly
- ___ Listens to me
- ___ Is female
- ___ Is male
- ___ Caring
- ___ Non emotional
- ___ Has a good reputation
- ___ Understands women
- ___ Takes charge of my health
- ___ Gives me lots of information
- ___ Respectful
- ___ Easy to talk to
- ___ Accessibility (takes my insurance, location of practice, etc.)
- ___ Other (Please specify) _____

11. Please mark the SECOND most important characteristic that you consider when choosing an OB-GYN.

- ___ Explains things clearly
- ___ Listens to me
- ___ Is female
- ___ Is male
- ___ Caring
- ___ Non emotional
- ___ Has a good reputation
- ___ Understands women
- ___ Takes charge of my health
- ___ Gives me lots of information
- ___ Respectful
- ___ Easy to talk to
- ___ Accessibility (takes my insurance, location of practice, etc.)
- ___ Other (Please specify) _____

12. Please mark the THIRD most important characteristic that you consider when choosing an OB-GYN.

- ___ Explains things clearly
- ___ Listens to me
- ___ Is female
- ___ Is male
- ___ Caring
- ___ Non emotional
- ___ Has a good reputation
- ___ Understands women

- _____ Takes charge of my health
- _____ Gives me lots of information
- _____ Respectful
- _____ Easy to talk to
- _____ Accessibility (takes my insurance, location of practice, etc.)
- _____ Other (Please specify) _____